NATIONAL AUDIT OFFICE

The Radiocommunications Agency's joint venture with CMG

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL
HC 21 Session 2000-2001: 8 December 2000

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Contents

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John Bourn **National Audit Office**
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executive summary

In this section

Introduction

1 The Radiocommunications Agency (the Agency) are an Executive Agency of the Department of Trade and Industry (the Department). They regulate the use of the civil radio spectrum in the United Kingdom (**Figure A overleaf**). Their work includes licensing the use of the radio spectrum, assigning frequencies over which users can transmit signals, monitoring use of the spectrum to confirm that there is no unauthorised use and investigating interference detected by their monitoring activities or in response to complaints from users.

2 In June 1998 the Agency entered into a partnership with CMG (UK) Ltd, the UK subsidiary of CMG plc, a leading European information technology (IT) services group, referred to in this report as CMG. The two parties established a joint venture company, Radio Spectrum International, owned 30 per cent by the Secretary of State for Trade and Industry, on behalf of the Agency because the Agency do not have the legal right to own shares, and 70 per cent by CMG. Radio Spectrum International provide the Agency with IT services and exploit commercially the Agency's skills by selling consultancy services and IT systems to overseas administrations.

The focus of our study

3 We examined:

- why the Agency chose a partnership to meet their IT requirements;
- how well the procurement of the partner was managed;
- whether the foundations have been laid for a successful partnership; and
- what benefits are likely to arise from it.

These four questions are analysed in Parts 1-4 and findings are summarised below. Our methodology is summarised in Appendix 1.

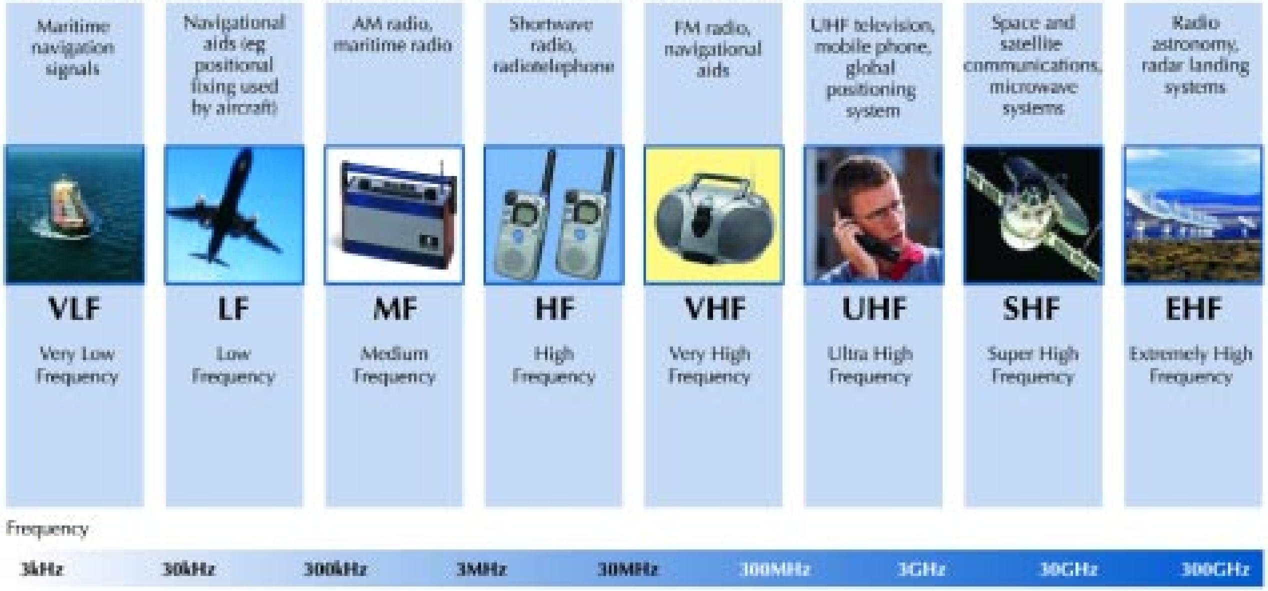
Paragraphs 1.5-1.22

Part 1: Why did the Agency choose a partnership for delivery of IT services?

4 IT is important to the Agency's business, impacting on practically every aspect of their work. For example, the Agency use large, sophisticated databases and bespoke applications developed in many cases by the Agency's radio engineers to model the impact of the allocation of frequencies on users. IT is also a key element in the Agency's research and development aimed at extending the usable radio spectrum. When first considering different ways of obtaining IT services in 1994, the Agency were unable to meet their requirement for IT services from in-house resources and were heavily reliant on the use of expensive individual contractors. The Agency were keen to achieve financial savings by bringing this reliance to an end.

A The radio spectrum

This figure shows the range of frequencies which make up the radio spectrum and the main user groups for specific points of the spectrum. The Agency manage the spectrum to achieve the most effective use of it and in accordance with domestic and international regulations. They license use by companies and individuals and monitor activity to prevent unauthorised use and interference to transmission.



Note: kHZ = kilohertz, or 1000 Hz; MHz = megahertz, or 1000 kHz; GHz = gigahertz, or 1000 MHz

Source: *National Audit Office*

5 The Agency reviewed a number of options including outsourcing, which would have involved the transfer of IT staff and responsibility for delivering services to a private sector company. Concerned about transferring business-critical IT systems to a contractor, the Agency sought a solution that would give them more influence over the delivery and development of IT services than they considered could be achieved by outsourcing. The Agency regarded this influence as particularly important because they considered that their engineers needed to retain the flexibility to modify systems in response to new developments in technology and that this would not be easily accommodated in an outsourcing contract. The Agency also wanted to retain some in-house expertise in the delivery of IT services so that they could, if necessary, resume the provision of IT services in-house at some future date. In addition, they considered it important to retain sufficient in-house expertise to interact effectively with the private sector company. The Agency decided that they could best achieve these objectives through a long-term partnership with a private sector company. The partnership, moreover, would give the Agency access to a wider range of skills and resources than they had in-house, be available when needed and at a lower cost than their existing arrangements.

6 The Agency had, over a number of years, been receiving a large number of requests for assistance in spectrum management issues from overseas radio spectrum administrations. They considered that there was scope to exploit commercially their expertise in spectrum management through the provision of consultancy services and the sale of their spectrum management IT systems. They decided to link the delivery of IT services and commercial exploitation as one project. The Agency reasoned that the partner would acquire, through the delivery of IT services, a good understanding of the work of the Agency and their IT systems, and so would be in a strong position to sell these systems and the Agency's expertise in radio spectrum management. The commercial potential of these systems would also give the partner a clear incentive to concentrate on the efficient and effective delivery of the Agency's IT services.

7 After investigation of the options the Agency decided the partnership should take the form of a joint venture company and that this would provide them with the influence they sought over the provision of IT services. The idea of establishing such a company was an innovative approach to securing IT services in the public sector at the time. The Agency recognised that this approach would carry some risk as there was no existing model or guidance.

8 The Government is encouraging departments and agencies to exploit their skills and assets commercially through the Wider Markets Initiative which is aimed at improving the management of public sector assets. This partnership is an early example of an agency trying to exploit their intellectual skills base and property commercially with the assistance of a private sector partner.

Part 2: How well was the procurement managed?

Establishing the partnership overran the planned timetable and budget

Paragraphs 2.1, 2.4-2.8, 2.19-2.36

9 The Agency originally envisaged that securing a partner would take 13 months, rather than the 32 months it eventually took. A number of factors contributed to the delay. Senior management in the Agency had other priority tasks including progressing the Wireless Telegraphy Act 1998, which allows fees for spectrum licences to be set based on the economic value of the spectrum, thus enabling auctioning for the first time. In addition, the emergency relocation of the Agency following the destruction caused by the London Docklands bombing in February 1996 made maintaining a service for customers and managing the spectrum priorities.

10 Through most of the procurement exercise the Agency took the view that the IT services operated mainly by contractors, rather than in-house staff, should be transferred first, thereby realising financial savings at an early stage. On this basis the Agency wanted to transfer the development work related to their bespoke IT systems first and to leave to last the transfer of the maintenance and management of hardware and non-business specific software. The Agency also did not want to guarantee the partner a minimum workload so that they could maintain pressure on the partner to keep charges competitive. The Agency considered that these measures would emphasise to potential bidders that what was on offer was not a conventional IT outsourcing contract but one which would require the supplier to add value in the development of systems. The Central Computer and Telecommunications Agency (CCTA) - then an Executive Agency of the Cabinet Office, now an Executive Agency in the Office of Government Commerce in the Treasury - advised that the Agency's proposed transfer order, the retention of an in-house capability and the absence of a minimum guaranteed workload would create uncertainty in the minds of potential bidders. They would be likely to assume that the Agency lacked commitment to the principles of partnership. An extended dialogue between CCTA and the Agency on the issue delayed the procurement. During final negotiations with CMG, when the Agency were satisfied that CMG understood the nature of the partnership on offer, the Agency agreed to a transfer similar to that initially proposed by CCTA.

11 With no similar previous public sector project to serve as a model the Agency underestimated the cost of securing a partner. Their original estimate was £550,000 including the cost of Agency staff working on the project. The decision to form a partnership through a joint venture company, which broke new ground in the relationship between the public and private sectors, increased costs significantly. By the time the contracts were signed with CMG in June 1998 the Agency had spent approximately £3.4 million. Of this sum about £2 million was paid to professional advisers and £0.5 million to CMG for work they carried out before the award of the contract. This work by CMG included analysing the work needed to establish Radio Spectrum International and auditing the Agency's IT systems to facilitate a rapid transfer of IT services.

Paragraphs 2.15, 2.18, 2.22-2.24

The proposed structure of the partnership reduced competition

12 Although the proposed structure and nature of the partnership represented a new departure in the relationship between the public and private sectors there were 56 expressions of interest in the project. In February 1996 the Agency drew up a long list of 12 potential bidders. Eventually in June 1997 two companies, CMG and Logica, submitted unpriced technical bids in response to the Agency's full specification for the partnership. Of the other ten potential bidders, nine withdrew and one was acquired by another potential bidder. The Agency rejected Logica's bid because Logica were reluctant to accept the Agency's proposal that the partnership, in the form of a joint venture company, should supply IT services and also exploit commercially the Agency's expertise in spectrum management. Logica wanted a direct contract with the Agency for the supply of IT services because Logica considered that there would be serious conflicts of interest within the Agency as they attempted to satisfy the roles of both purchaser and supplier of IT services. Logica were, however, prepared to form a joint venture with the Agency for the commercial exploitation of the Agency's expertise.

13 A factor that reduced interest amongst potential bidders was the Agency's proposal that the Agency should hold a controlling interest in the joint venture company. The Agency initially considered this necessary to secure the influence they wanted over business critical IT systems. Many potential bidders felt that this level of control created uncertainty about their freedom to add value to the delivery of services. Before commencing negotiations with CMG, the Agency reviewed their requirements and decided to take a minority (30 per cent) stake in the company. At this stage the Agency were satisfied that the influence they sought over business critical IT systems could be achieved through contractual provisions. In September 1997 the Agency effectively issued an amended full specification reflecting this change to those potential bidders who had received the original in April 1997. This approach did not generate fresh interest in the partnership.

14 Another factor that reduced interest was the apparent weight the Agency attached to the commercial exploitation of their expertise. Most potential bidders did not feel they had the knowledge to sell the Agency's expertise. Of the six potential bidders left in the competition when the Agency issued their full specification in April 1997, three were deterred from competing further because they considered that CMG had a commanding position through their

existing IT contracts with the Agency. The view was that CMG would have already acquired a good understanding of the consultancy services, systems and software that could be sold.

Part 3: Have the foundations been laid for a successful partnership?

Paragraphs 3.12-3.15, 3.21-3.26, 4.17-4.18

15 The Agency considered that the success of the partnership would depend on establishing and sustaining a co-operative relationship with their partner at both operational and managerial levels. They considered that the importance of IT to the Agency and the pace of technological change meant that the partner would have to work flexibly with the Agency as priorities and requirements changed. Early indications are that a co-operative and collaborative partnership has been achieved and that a trust-based relationship is emerging. Members of the Agency's staff report greater levels of satisfaction with the IT services being delivered. Developments and changes to IT services are coming on stream far more rapidly than prior to the partnership. The Agency's co-operative relationship with CMG is now the approach urged in Recommendation 20 of the Cabinet Office's report, "Review of Major Government IT projects, Successful IT: Modernising Government in Action" published in May 2000.

16 While seeking a trust-based relationship the Agency have secured contractual safeguards. To minimise the potential for disagreement over charges for services, the Agency have full access to the accounting records of the company. This openness extends to CMG, who have undertaken to provide long-term secondees to the joint venture company, Radio Spectrum International, at cost and have agreed to provide the Agency with all evidence required to verify that charges for such secondees do not include any element of profit. CMG have granted the Department the right to audit their files to verify compliance with the relevant contractual terms. The contract also provides the Comptroller and Auditor General with the right to access the books of the joint venture company. This access extends to CMG so far as is relevant for the purposes of examining and certifying the Agency's accounts and examinations to determine the economy, efficiency and effectiveness with which the Agency have used their resources.

Part 4: What benefits are likely to arise?

Paragraphs 3.17, 3.23-3.24, 3.27-3.29, 4.5-4.16, 4.19-4.21, 4.24-4.26, Figures 12-15

The partnership should improve the value for money of the IT services

17 Although the Agency and CMG agreed prices in the absence of competition, the Agency expected that the contract for the delivery of IT services, worth £51.5 million on the basis of discounting the cash flows to 1998 prices, would generate savings of £10.7 million compared to the Agency continuing with their existing arrangements. These savings were in the range of £10.3 million - £12 million targeted by the Agency before negotiations commenced. Financial savings arise mainly because the cost to Radio Spectrum International of IT staff is about 30 per cent less than the Agency were previously paying to contractors. These savings may be overstated because the Public Sector Comparator - the benchmark drawn up by the Agency on the basis that the IT services would continue to be provided in-house by the Agency and against which the cost of the partnership was compared - assumed the same high level of development work continuing throughout the period of the contract. CMG's bid, which was compared against the Public Sector Comparator, assumed that the demand for development work would decrease. We estimate that if, in CMG's model, the charges for development work are increased to reflect the level of work estimated in the Public Sector Comparator the potential level of savings reduce from £10.7 million to between £4.9 million and £8.0 million.

18 During the first two years of the partnership IT developments were implemented more rapidly and smoothly than prior to the partnership, including a successful relocation of the Agency's headquarters. The Agency attribute this to a co-operative working relationship with Radio Spectrum International. Reports from the Agency's monitoring unit suggest that the quality of service provided has improved significantly. Service improvements are difficult to quantify because detailed information about cost and service levels was not kept prior to the partnership. The Agency told us that this was a consequence of how the Agency's systems had evolved, often being developed in-house by their own staff and without the controls they now expect in terms of project definition and service delivery criteria. An important benefit of the partnership is that, with the setting of standards by the Agency for the levels of service to be provided, they are now able to measure improvements in service over time.

19 Radio Spectrum International made a profit after tax of £1.3 million (about seven per cent of turnover) in the first 18 months of operation from the delivery of IT services to the Agency. As a percentage of turnover this profit was higher than the six per cent estimated by the Agency in their business case for Radio Spectrum International. Concerned about this level of profit and that profits for later years would not reduce to the notional levels anticipated in the business case, the Agency entered into negotiations with CMG to reduce the level of desktop charges. The Agency were successful. CMG agreed to reduce the charges levied by Radio Spectrum International to the extent that the Agency should save on average about £1 million per annum, in cash terms, over the remaining five years of the contract.

20 The Agency were able to react to the higher than estimated profitability of Radio Spectrum International because the way the partnership deal was structured made Radio Spectrum International's profits transparent. In a typical outsourcing of IT services responsibility is contracted to the private sector and the profits made are not disclosed. The Agency also share in profits through dividend payments in proportion to their share ownership of 30 per cent. The Agency have so far received dividends of £241,000.

The partnership has not introduced new risks to the Agency

Paragraphs 4.22-4.24, 4.27-4.29

21 The establishment of the partnership does not expose the Agency to significant operational risks. The Agency had extensive experience of working with CMG and planned no new system development projects that might impede their ability to manage the radio spectrum in the most efficient manner. CMG have provided an indemnity against costs and liabilities arising from the provision of services by Radio Spectrum International.

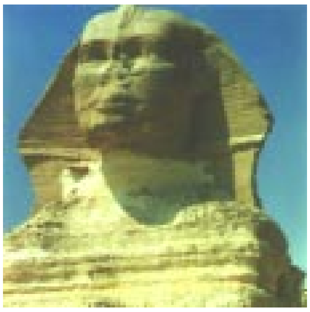
22 The Agency have limited their financial commitment in Radio Spectrum International to the value of their share capital (£300). CMG have undertaken to provide all working capital needed by Radio Spectrum International, and to fund initial marketing expenditure of the international work. The Agency and CMG could have terminated the arrangement to exploit commercially the Agency's systems and expertise after two years, but, following a review of prospects in the summer of 2000, both parties have agreed to continue with the international business and to review its strategy annually.

23 For the period of the contract Radio Spectrum International have been granted an exclusive licence to use crown copyright materials and the Agency's intellectual property rights for the purpose of providing international consultancy services and to sub-license these rights to customers. The Agency recognised the risk to their name and reputation from the misuse of these rights and built appropriate safeguards into contractual agreements. These require, for example, Radio Spectrum International to inform the Agency of prospective customers and the consent of the Agency before agreements are entered into. Intellectual property rights arising from the development of IT services are vested in the Agency.

The Agency have not been able to retain an in-house capability at the level they wished (Paragraphs 1.12-1.13)

24 The Agency have a seven-year contract with Radio Spectrum International and can increase it to ten years, providing them with long-term stability in the provision of IT services. The Agency had intended to second staff to work in Radio Spectrum International so that they would retain a sufficient skills base to allow them to resume the provision of services in-house at the end of the contract or at termination if performance proved inadequate. But the Agency have been unable to retain or recruit IT staff to fill the posts open to their staff in Radio Spectrum International and are considering ways to improve the recruitment and retention of IT staff.

Radio Spectrum International have won a number of consultancy contracts (Paragraphs 4.33-4.42)



25 By March 2000 Radio Spectrum International had successfully tendered for four projects (in Russia, Greece, Egypt and India) and were at an advanced stage in negotiations for three contracts in the Gulf States. These primarily involve the provision of advice on a consultancy basis. Income has not so far been sufficient to cover the high initial start up costs for this new venture. The International Business Division of Radio Spectrum International incurred accumulated losses of £141,000 by January 2000 compared with projections by the Agency and CMG of pre-tax profits of £110,000. The Agency hoped that provision of consultancy services would lead to the sale of their systems. The original business plan forecasted at least one sale of the existing IT systems by the end of 1999 and this is where most profits would have arisen. No systems have as yet been sold. It has become clear that because much of the existing Agency software is designed to meet United Kingdom regulatory requirements its marketability internationally is limited. The Agency told us that Radio Spectrum International now has the capability to develop bespoke software for international customers and to evaluate systems in development for wider international use.

Lessons learned

The partnership entered into by the Agency demonstrates that public sector bodies can produce innovative solutions to traditional problems. The main lessons learned by the Agency which may be of benefit to other public sector bodies contemplating entering into partnerships are:

i. The need for clear objectives at the outset of the process

Uncertainty about the aims of the partnership, how it should be implemented and how the IT systems and services should be transferred to the partner delayed the procurement and contributed to the withdrawal of a number of potential bidders. Clear objectives understood by all those involved in the procurement would help minimise delay and encourage a positive response from potential bidders. (Paragraphs 2.4-2.11, 2.14-2.18)

The communication of clear objectives might have been helped by the appointment of a single responsible "owner" for the project. This is now recommended by the Cabinet Office in their report, "Review of Major IT Projects, Successful IT: Modernising Government in Action" published in May 2000. Two, and sometimes three, members of the Agency's management board supervised the Agency's procurement. (Paragraphs 2.25-2.36)

ii. Trying to maintain a competitive bidding process or, in the absence of this, ensuring adequate benchmarks exist to measure value for money

Wherever possible departments should enter into contracts following a competitive bidding process. In this case competition broke down before priced bids were available because all but two potential bidders withdrew and the Agency rejected one bid. Measuring the value for money from the deal was then made difficult because details of IT service levels were not available against which to measure the outcome of negotiations. When contemplating ventures such as that entered into by the Agency, organisations should consider, as part of the design of the project, establishing existing service levels so that subsequent changes in performance can be measured. (Paragraphs 2.15, 4.19-4.20)

iii. Considering the implications of linking projects where one element is novel and unproven

The Agency considered whether the commercial exploitation of their expertise should be linked with the new arrangements for delivering IT services as a single project. Their deliberations would have been reinforced by a detailed appraisal of the potential market for the Agency's systems and expertise. (Paragraphs 1.18-1.21, 4.34-4.36)

Commercial exploitation of the Agency's expertise was a new venture and this element of the project discouraged some bidders who were confident in their ability to supply IT services but not the sale of radio spectrum management expertise. Where deals break new ground in this way a robust supporting business case might provide assurance to prospective bidders, rather than relying on untested assumptions of market potential. (Paragraph 2.18)

iv. Recognising the importance of aspects such as alignment of business interests, trust-based relationships and effective collaboration but also building in contractual protections

The Agency developed a good understanding of the key elements necessary for a successful partnership and applied these successfully to the arrangements with their partner. While making the establishment of the partnership a priority, the Agency prudently agreed a contractual framework such that delivery of satisfactory services was not solely dependent on a collaborative relationship with CMG. (Paragraphs 3.1-3.2, 3.12-3.15)

As regards the key issue of the untested commercial exploitation of the Agency's systems and expertise, the Agency built in to the contract an opportunity on the second anniversary of the contract for either party to terminate the arrangement if the venture is unlikely to become profitable. (Paragraph 4.33)

v. Having a formal process for deciding on the percentage stake to take in a joint venture company

In many cases the private sector partner will be keen to take a majority holding in a joint venture company. If the public sector body is the majority shareholder the company will be subject to normal Government accounting policies and requirements, which potential partners may regard as incompatible with the pursuit of commercial enterprises. In this case the Agency initially wanted to take a majority holding but concluded that sufficient rights to protect Government interests could be achieved contractually with a minority holding. The Agency's legal advice was that a shareholding above 25 per cent and below 50 per cent was advisable. They decided that 30 per cent was sufficient to provide them with appropriate rewards. In coming to this decision they did not, however, carry out a detailed evaluation of each partner's contribution, something that we recommend should be done as a matter of good practice. (Paragraphs 2.22-2.24)

Part 1

The Radiocommunications Agency sought an innovative solution to the delivery of information technology services

1.1 The Radiocommunications Agency (the Agency) - an Executive Agency of the Department of Trade and Industry (the Department) - are responsible for most civil radio matters in the United Kingdom and in particular regulating the use of the civil radio spectrum.

1.2 Radio waves become useless if transmissions by one user cause an unacceptable degree of interference to use by another. This potential for interference, together with users' need for a stable planning framework and the Government's desire to meet the increasing demands of those wanting to use the radio spectrum, which is a limited resource, gives rise to the need to manage and regulate spectrum use. Control allows this resource to be managed in ways that are intended to maximise economic benefit. The Agency therefore have the following regulatory and enforcement roles:

- They regulate use through issuing licences to approved users.
- As part of their enforcement role the Agency monitor the use of the radio spectrum to confirm users are licensed and that licence conditions are complied with.
- The Agency also investigate reports of interference to radio services. Priority is given to interference which might endanger public safety (such as interference to communication between the emergency services or aircraft landing systems).

1.3 In this part of the report we examine the reasons for the Agency entering into a partnership with CMG (UK) Ltd (**CMG**) for the supply of the Agency's information technology (**IT**) services and to build on the Agency's international reputation by providing consultancy services and selling software and IT systems to overseas administrations.

1.4 At the time when the Agency conceived the project, most departments and agencies that sought private sector support for IT services did so through two general approaches. One was outsourcing, where responsibility for the provision of services was transferred to a private sector company, which included transferring staff to the supplier; the other was contracting in services from a chosen supplier. The Agency decided that neither approach satisfied their objectives of obtaining their IT services more economically and retaining some control over the delivery of the services. The Agency, considering that the attainment of both objectives required the retention of an in-house IT services capability, took the view that partnership with the private sector was the best solution. The innovative characteristic of the Agency's approach was to base the partnership on a joint venture company, Radio Spectrum International, jointly owned by the Secretary of State for Trade and Industry and CMG. Ownership of the company had to rest with the Secretary of State because the Agency do not have the legal right to own shares.

The Agency needed to improve the efficiency and effectiveness of their IT services

1.5 IT is a necessary tool of the Agency in controlling and monitoring radio usage. The Agency for example use large sophisticated databases and bespoke applications to allocate radio spectrum to types of user and to assign specific frequencies to individual customers within technical and geographical parameters. IT is also a key element in the Agency's research and development work aimed at extending the usable spectrum as new technologies develop, and making greater use of the existing spectrum. This involves the development of specialised computer modelling techniques. The issue of licences to transmit signals on specific frequencies, the collection of licence fees and monitoring to detect unauthorised use is all dependent upon specialised IT systems.

1.6 By 1995 the Agency had identified the need to make immediate and substantial investment in IT systems. This was driven by inadequacies in existing systems that, if not remedied, could adversely affect the Agency's ability to meet satisfactorily the expectations of users of the radio spectrum given forecasts of continued growth in demand for access to this resource.

1.7 For many years the Agency had found it difficult to recruit and retain sufficient IT staff of suitable quality. The Agency did not consider it feasible to increase the number of in-house staff to the level necessary to meet the expected demand for services.

1.8 In 1996 the Agency estimated that there was a need for over 90 staff to support IT activities across the Agency and staffing would need to continue at this level until at least 2001. Based on employment patterns it was assumed that this total would be made up of 48 in-house staff and 44 contractors. The average cost per contractor was more than three times that of in-house IT employees. The Agency, however, recognised that the benefits of ending the reliance on contractors went beyond the achievement of financial savings. The considerable time spent by the Agency's managers to recruit, train and manage contractors could be cut so freeing up resources for activities directly related to the business of managing the radio spectrum.

The Agency decided a partnership was the best solution

1.9 The Agency concluded that their limited in-house resources could not support the business effectively. The pressure on staff to satisfy day-to-day requirements made it difficult for them to keep up with changes in technology and growing demand from users.

1.10 Even if the Agency had been able to recruit and retain sufficient staff in-house to meet their needs for IT services, senior management recognised that the involvement of the private sector offered other advantages. Transferring some of the responsibilities for delivering IT services to the private sector would free up time for the Agency's management to concentrate on key activities, rather than the day-to-day delivery of IT services. Further, the Agency recognised that a major private sector company should be able to deliver services at a lower cost through greater economies of scale.

1.11 They decided that a partnership with a private sector IT supplier would be the best means of reducing the cost of delivering their IT services and of allowing them to have the control they wanted over the delivery of these services while enabling them to retain their IT staff. The Agency considered that a partnership, rather than an arms length outsourcing agreement, would more readily

allow their engineers (who had developed a number of IT systems) to continue modifying systems in response to developments in radio spectrum technology.

1.12 As the Agency regarded IT services as central to their core activities of issuing licences and regulating use of radio frequencies the Agency attached importance to retaining an in-house IT service which had a detailed knowledge of their business and operations. They also considered it important to retain sufficient in-house expertise to interact effectively with the partner.

1.13 In 1995 the Agency's senior management gave a commitment to their IT staff that new arrangements for IT service delivery would not result in redundancies. The Agency intended that their IT staff would be involved in developing the scope of the partnership and taking the project forward. The Agency gave assurances that no member of staff would be transferred to a private partner without consent. In the event many of the Agency's in-house staff left the Agency before the partnership was agreed or shortly afterwards.

1.14 The Agency intended that the new IT support arrangements would, through their partner, provide access to a pool of well qualified IT staff. The Agency are a relatively small business, employing about 490 staff, and the senior management were concerned that a private sector supplier would allocate the best staff to bigger customers where the rewards were greatest - especially if a competitive bidding process had squeezed down profit margins. The Agency hoped that a partnership in which they and the supplier were working together to achieve a common goal would be likely to deliver the necessary quality of resources. Not only would the Agency have access to a wider range of skills and resources than hitherto, it was also intended that these would be available on tap and allow a more dynamic approach to dealing with IT problems.

1.15 When deciding the type of partnership to enter into, the Agency considered it was important to achieve an arrangement in which there would be flexibility in the delivery of IT services. The radiocommunications industry was going through a period of change and the partnership would need to be sufficiently flexible to change with it. Rapid changes in radio technology could have a significant effect on the Agency, affecting the volume of work they would be required to do and the economic and regulatory regimes. It was important to the Agency that their IT systems could cope with this change.

1.16 In the Agency's experience it could take consultants up to a year to understand fully the Agency's business and this could result in the delivery of systems that failed to meet the Agency's business requirements. The Agency therefore wanted to retain flexibility in the allocation of work between themselves and the partner and thought that an in-house team would better run the key systems. They concluded that a flexible partnership arrangement would give them the greatest say in the delivery of business critical systems.

The Agency included the commercial exploitation of their IT systems and expertise in spectrum management in the project

1.17 The Agency represent the United Kingdom at several international fora, such as the International Telecommunication Union, and promote the interests of the United Kingdom radio users through key roles in international organisations. The Agency's good reputation with other international spectrum management bodies was the reason why in 1995, when the future of IT service delivery was being considered, the Agency were receiving an increasing number of enquiries for assistance. The Chief Executive of the Agency decided to include the commercial exploitation of the Agency's expertise as part of the strategic partnership they were seeking with the private sector.

The Agency saw the potential to generate revenue from the exploitation of their expertise

1.18 The Agency did not have the resources available to meet the demands for assistance from other countries. They considered that the capacity to respond to such enquiries could not only generate income but also deliver wider benefits by enabling the Agency to further their objective of enhancing their reputation internationally. It could also potentially open up wider markets for United Kingdom goods and services.

1.19 In 1994 the Agency commissioned Quotient Communications Ltd, a consultancy firm operating in the mobile, cellular and fixed communications markets, to carry out a feasibility study of the possibility of the Agency offering their specialised skills and services on a fee-paying basis. Quotient identified three categories of potential candidates:

- administrations of the newly emerging Eastern and Central European countries;
- administrations in developing nations; and
- United Kingdom dependent territories.

1.20 Quotient concluded, on the basis of a series of interviews and enquiries, that there were substantial demands for a service but that the administrations in need of assistance would often need external sources of funding. They concluded, however, that there was an opportunity for the Agency to provide services on a repayment basis from which the Agency might make a relatively small profit. Quotient recommended that the Agency first define their aims, balancing the prospects of achieving them against the business risks involved in such a venture.

1.21 Quotient had very limited terms of reference for their market survey, which did not extend, for example, to ways in which the Agency might market their skills. The Agency did not commission further research but as the project developed concluded from their contacts with other countries that the demand for global and local mobile telephone networks had increased. As a result they determined that there was a need for successful management of the radio spectrum and that countries could afford to meet the cost. More importantly the Agency perceived that spectrum managers could charge significant fees for some licences and could pay for consultancy work, and that this has become more pronounced since the auction of radio spectrum for use by mobile phone companies.

The Agency considered that an IT services company would be best placed to exploit the Agency's expertise

1.22 The Agency considered that, because their effectiveness in managing the radio spectrum was dependent upon their information systems, the provider of these systems would know enough about them to market them internationally. As provider of IT services the Agency's partner would be familiar with the Agency's business and could therefore market not just the information systems but also the Agency's expertise. In addition the Agency considered that the commercial potential of these systems would give the partner a clear incentive to concentrate on the efficient and effective delivery of the Agency's IT services. For these reasons the Agency decided to include the exploitation of their expertise as part of their strategic partnership.

Part 2

The procurement process overran the planned duration and budget

2.1 In this part of the report we look at the Agency's procurement of the partnership. In April 1995, the Agency estimated that the procurement would take 13 months and cost £550,000. The partnership deal was not signed until 8 June 1998 and cost the Agency approximately £3.4 million to procure. We found that the decision to break new ground in the public sector by basing the partnership on a joint venture company was responsible for much of the increase. We also found that disagreements within the Agency about the scope and implementation of the partnership contributed to the delay and the length of the process contributed to the withdrawal of some of the potential bidders.

Initial proposals for implementing the partnership adversely impacted on the procurement process

2.2 By April 1995, when the Agency's management board initiated a study to define the partnership, approximately half the complement of the in-house IT services unit comprised contractors, remunerated on a daily fee basis. The Agency's management board attached priority to the implementation of the partnership such that the partner's employees would rapidly replace the contractors. They also considered that implementing the partnership on this basis would provide a role in the delivery of IT services for an in-house IT services unit. The management board wanted to retain an in-house capability to avoid the partner becoming a monopoly supplier of IT services upon which the Agency might become increasingly reliant. The management board did not want the Agency to guarantee to the partner a minimum workload. They reasoned that the absence of such a guarantee and the retention of an in-house capability to supply IT services would maintain pressure on the partner to keep charges for the services competitive.

There was disagreement about how the partnership should be implemented

2.3 In April 1995, the Agency engaged the Central Computer & Telecommunications Agency (CCTA), then an Executive Agency of the Cabinet Office, now an Executive Agency in the Office of Government Commerce in the Treasury, to assist the Agency's project manager in defining the partnership. The terms of reference governing CCTA's engagement included the requirement for CCTA to define the partnership in the best interests of the Agency.

2.4 CCTA commenced their work by interviewing individually all the members of the Agency's management board about their understanding of and objectives for the partnership. They identified 12 objectives, which are listed in **Figure 1**. CCTA did not identify preferences for particular objectives, or views on how these should be attained; rather they used the results of the interviews as a guide when determining the objectives and critical success factors for the partnership.

2.5 In preparing their definition of the partnership CCTA also took soundings of the market, obtaining in May 1995 the views of seven IT services companies. The results of the interviews were encouraging with CCTA finding six of these companies enthusiastic about the prospect. At the time, however, CCTA did not appreciate the importance the management board placed on maintaining an in-house capability and not giving the partner a guaranteed minimum workload, thereby indicating to potential bidders that what was on offer was not an outsourcing contract.

1 Objectives for the strategic partnership expressed by members of the Agency's Management Board during interviews with CCTA

- To improve the value for money in providing the Agency with IT services by replacing singleton contractors with employees from the partner.
- To sustain the value for money in providing the Agency with IT services.
- To provide the Agency's IT services staff with the widest possible choice of employment opportunities. The Agency had undertaken not to make any staff redundant.
- To ensure that the Agency have the right to participate actively in the supply of IT services.
- To retain, within the Agency, employees with the IT skills necessary to operate the Agency's systems.
- To involve the partner in the demand side for IT services. The partner would be rewarded if their contribution improved the Agency's business performance.
- To exploit internationally the Agency's expertise and information systems.
- To meet the Agency's increasing demand for IT services.
- To allow the Agency's management more time to focus on the Agency's core business.
- To be flexible enough to cope with business changes within the Agency.
- To provide the Agency with up-to-date information technology and solutions.
- To comprehend fully the Agency's core business and technical requirements.

Source: The Agency

2.6 In August 1995, CCTA proposed that the first transferred service should be infrastructure facilities management, that is the maintenance and management of hardware and non-business specific software. This service required little, if any, knowledge of the Agency's spectrum management business, and as such, the transfer could be completed within six to nine months. CCTA reasoned that this transfer would provide the Agency with a relatively early opportunity to gauge performance and the partner's commitment to the principles of partnership.

2.7 CCTA saw the Agency's satisfaction with the partner's delivery of infrastructure facilities management as the trigger for transferring the more business specific IT services, i.e. the development of new and the maintenance of existing services. It was, however, in the supply of these services that most of the Agency's contractors were engaged. To the management board, CCTA's proposed sequence for transferring IT services would not achieve the objective of early financial savings through the rapid replacement of contractors and posed a threat to the objective of retaining an in-house capability. Moreover the management board were concerned that the suppliers main interest would be in a conventional outsourcing arrangement. If the suppliers were given responsibility for the delivery of infrastructure facilities management first, as CCTA proposed, the board were not confident that they would be able to secure from the supplier the parts of the project that were most important to the Agency, namely the development services. Although CCTA amended their report defining the project to reflect a transfer of IT services meeting the management board's objectives, the differences of opinion that had arisen persisted for eleven months. In June 1996, the management board, with CCTA's agreement, reorganised the procurement team and redefined CCTA's role to that of providing advice on an ad hoc basis. This reorganisation caused a five-month delay to the procurement process (Appendix 3).

2.8 If CCTA and the Agency had prepared an agreed statement identifying and prioritising the objectives for, and constraints on, the partnership at an early stage CCTA would have had the information they needed, in their discussions with the IT companies, to represent accurately the Agency's objectives for the partnership. CCTA's feedback would then have given the Agency a direct insight into the acceptability of the management board's proposals.

The proposed implementation of the partnership was not attractive to potential bidders

2.9 The advertisement that the Agency published in February 1996 in the Official Journal of the European Communities generated 56 expressions of interest. From the 22 that replied to a follow-up questionnaire, the Agency selected a long list of 12 potential bidders.

2.10 When the Agency issued the outline specification in August 1996 to these 12 potential bidders the Agency provided them with the full details of the proposed order and scope of the transfer of IT services to the partner. In September 1996 six responded to the document. One proposed that the order be reversed. The other five had concerns about the uncertain scope of the IT services that the Agency would transfer.

2.11 We approached the potential bidders who did not respond to the outline specification for their views on the competition. Three told us that the Agency's proposed implementation of the partnership created considerable uncertainty about the scope of the services that would be supplied and said that the level of uncertainty did not seem compatible with the concept of partnership. Another potential bidder withdrew solely because it did not have the ability to exploit the Agency's expertise. One party withdrew because it had acquired one of the parties that responded to the outline specification.

The Agency's proposals for a joint venture company reduced competition and increased the procurement costs

2.12 The organisational structure put in place by the Agency in July 1996 is shown in **Figure 2**. To assist the new project manager the Agency engaged the following advisors:

- ASE, IT consultants, appointed in August 1996;
- Berwin Leighton, a firm of solicitors, appointed in October 1996;
- KPMG, financial consultants, a temporary appointment from December 1996 to April 1997, while the Agency hosted a competition for a financial consultant; and
- Capita, financial consultants, appointed April 1997 after winning the competition.

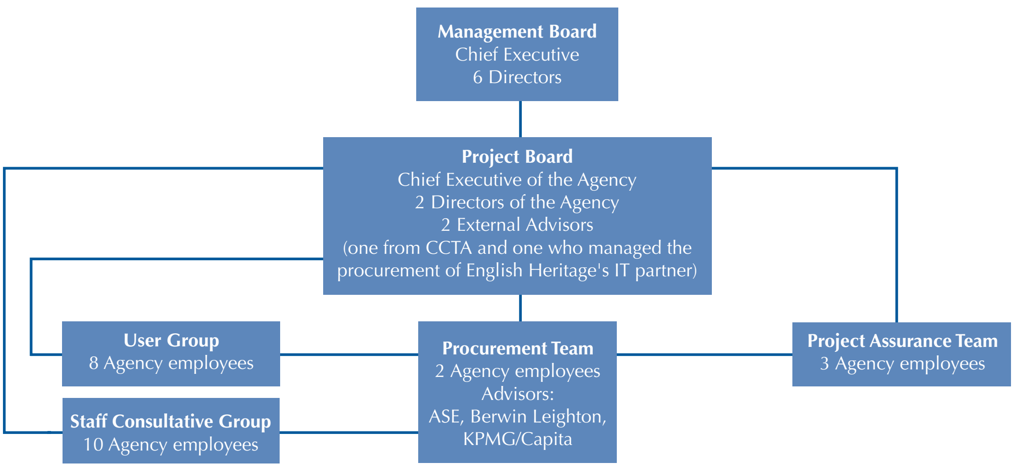
2.13 The procurement team left it to the potential bidders to propose the precise nature of the partnership when they issued the outline specification in August 1996. Of the six potential bidders who responded to the document, four proposed that the partnership should be founded on a joint venture company with two business streams, one providing IT services to the Agency; and the other exploiting the Agency's expertise. The Agency welcomed this approach, because they considered that a joint venture company would allow the Agency to retain the control they wanted over the supply of IT services. This proposed partnership would also provide the Agency's IT services staff with an option of working in the company while remaining employees of the Agency. In October 1996, the Agency sought and received from their Steering Board approval for the joint venture company.

The Agency's proposed form of joint venture company reduced bidder interest

2.14 In November 1996, the Agency had meetings with each of the six potential bidders at which the Agency presented their intention to found the partnership on a joint venture company. At this time only one of the potential bidders expressed reservations about the Agency's proposed partnership model. In April 1997, the Agency issued to all six potential bidders the full specification, which required them to submit descriptions of a partnership that accorded with the Agency's proposals (**Figure 3**). By this time five of the potential bidders had reservations about the proposed partnership and, to some extent, these were compounded by concerns about the apparent unwillingness of the Agency to consider alternatives.

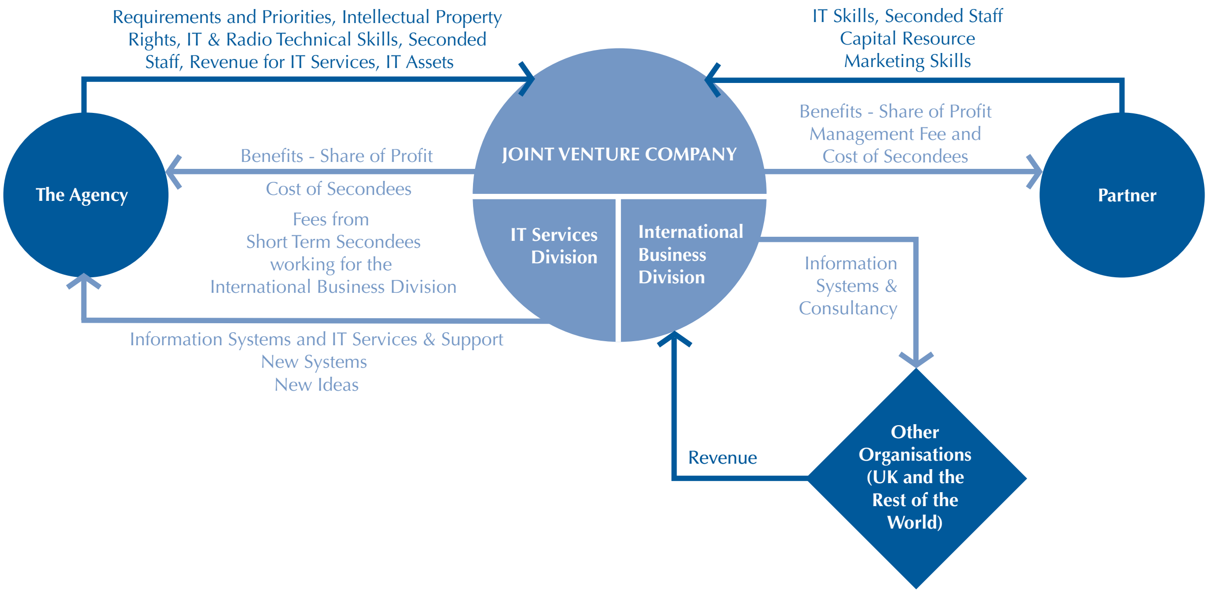
2.15 CMG and Logica responded to the full specification, but Logica's bid was based on a partnership structured differently from that sought by the Agency. Logica accepted a joint venture company for the exploitation of the Agency's expertise, but not for supplying IT services, which they wanted to supply directly. The Agency did not consider that they would be able to resolve their differences with Logica and, after consulting with their lawyers and CCTA, decided to reject the proposal, leaving only one bidder in the competition. At this stage, there had been no pricing of the bids so the Agency could not assess the cost of their decision to pursue a partnership founded on a joint venture.

2 The Agency's organisation to procure the partnership



Source: The Agency

3 **The Agency's high level proposals for the joint venture company**



- The Agency will incorporate a limited liability company under the Companies Act as the vehicle for the collaboration between the Agency and their partner.
- The Secretary of State for Trade and Industry and the partner will be shareholders in the joint venue company.
- The Secretary of State will have a majority shareholding.
- The Agency will second staff to the joint venture company.
- The joint venture company will, for an initial period of seven years, provide the Agency with IT services to meet their existing and future needs.
- The joint venture company will be licensed to provide spectrum management and related consultancy services to national and international bodies.

Source: The Agency

2.16 We interviewed the four bidders who did not respond to the full specification to ascertain their reasons for withdrawing and we also interviewed Logica to learn the reasons why they submitted only an alternative bid (**Figure 4**).

2.17 All five of the potential bidders who did not proceed further with the competition had concerns about the Agency's proposed involvement in the supply of IT services (**Figure 4**). They told us that these concerns stemmed from their knowledge that the Agency were seeking to reduce the cost of IT services through the replacement of their numerous contractors. They felt that once these savings were realised the Agency might use their proposed majority shareholding in the joint venture company to block proposals for adding value through improving the efficiency of IT services if such improvements threatened posts occupied by the Agency's IT staff. All five said that it was not in their commercial interests to participate in a relationship that could limit their exploitation of opportunities to add value.

2.18 With the exception of Logica, the potential bidders also told us they were concerned about the Agency's requirement that the joint venture company exploited the Agency's expertise. Three said that they were prepared to invest in this part of the partnership despite the absence of a robust business case supporting the business. A more serious concern was the weight that the potential bidders understood the Agency attached to the exploitation of their expertise. All three considered that one of their competitors, CMG, already possessed a good understanding of the commercial potential of the Agency's expertise and systems because of CMG's, then, current work developing systems important to the Agency's spectrum management business. Furthermore, CMG had linked up with The Smith Group, a leading company in the spectrum management business. The three potential bidders told us that in their opinion their bids would be at a disadvantage in competition with a bid from CMG/Smith because of the weight the exploitation of the Agency's expertise would carry in the evaluation of the bids.

4 Reasons why potential bidders, after receiving the full statement of service requirements, either withdrew or submitted only an alternative bid

	Potential Bidder No. 1	Potential Bidder No. 2	Potential Bidder No. 3	Potential Bidder No. 4	Logica
The Agency were not prepared to negotiate on the form of the partnership		●	●	●	●
There was a conflict of interest for the Agency if they were to be both supplier and purchaser of IT services	●	●	●	●	●
The exploitation of the Agency's expertise was not a viable business proposition	●	●	●		
The weight that the Agency attached to the bidder's ability to exploit the Agency's expertise favoured IT services contractors already working for the Agency		●	●	●	
There would be further delays to the procurement		●	●	●	
The transfer of services created too much uncertainty about obligations and opportunities	●	●	●	●	

Source: Potential bidders

The decision to form a joint venture company increased the professional advice required

2.19 In October 1996, when the Agency decided to base the partnership on a joint venture company, they accepted that the scope of legal advice had to be increased to deal with issues arising from this new type of relationship between the public and private sectors. The principal increases were in the fields of commercial and company law concerned with establishing the joint venture company and setting out the relationship between the shareholders.

2.20 The Agency also found that establishing the joint venture company required additional professional advice from financial consultants, specifically in the fields of tax and public sector/private sector control of the joint venture company. In November 1996 the Agency estimated that the additional advice they would require would cost them £175,000, excluding VAT, but did not keep records detailed enough to show what they eventually paid.

2.21 The Agency set themselves a savings target in advance of their negotiations with CMG, but the absence of a competitor placed greater pressure on the negotiating team, which included at times up to nine external advisors, to secure prices that achieved the target savings. The negotiations cost the Agency approximately £1 million in fees for external advisors. This was approximately £200,000 more than that estimated by the Agency in August 1997, two months before the start of negotiations, and approximately twice their estimate when they restarted the project in July 1996.

Changes to the proposed ownership and control of the joint venture company delayed the procurement

2.22 In the full specification, which the Agency issued to potential bidders in April 1997, the Agency specified that they would take the majority shareholding in the joint venture company. Only then did the procurement team consider the implications of the Agency having control over the joint venture company. A review found that:

- the joint venture company was likely to be classified as a public sector body because effective control of it would lie with the Agency and, as such, the company would have to be established as a non-departmental public body; and
- a joint venture company, as a public sector body, would be subject to the normal range of Government accounting policies and requirements, which potential private sector partners had indicated they did not find compatible with the pursuit of commercial enterprises.

2.23 The Agency realised that establishing the joint venture company as a public sector body would introduce further delays to the procurement. They considered that such delays put at risk their ability to retain the interest of the remaining bidder. Rather than take this risk the Agency decided to hold a non-controlling, 30 per cent, interest in the joint venture company and to secure the protection they needed through contractual provisions.

2.24 The Agency learnt from their legal advisors that this decision constituted a change to the partnership that was material to the procurement from the time when the full specification was issued in April 1997. To comply with procurement regulations the Agency, in September 1997, offered the six potential bidders who had received the full specification, the opportunity to respond to the change. None of the five that had withdrawn decided to take up this opportunity. Reviewing the control of the joint venture company, advising the potential bidders about the change including inviting those that had left the competition to re-enter and awaiting the responses delayed the procurement by four months (Appendix 3).

There were weaknesses in the Agency's overall management of the procurement

2.25 The Agency implemented procedures to govern the procurement with the intention of ensuring the production of high quality documents delivered on time and to budget. In practice strict compliance with these procedures became the source of significant delay and obscured accountability for the escalating cost of the procurement.

The document approval process compromised progress and cost control

2.26 From the start of the procurement to the commencement of negotiations with CMG, some of the documents produced by the procurement team required the approval of two and sometimes three specific members of the management board. Competing for the attention of these individuals were many issues relating to the governance of the Agency including progressing legislation for the auctioning of licences and relocating the Agency following the destruction of their headquarters in the London Docklands bombing in February 1996. Occasionally it took senior management months to approve documents. Between September 1995 to June 1996, the slow approval of documents, we estimate, accounted for nearly three months of delay (Appendix 3).

The Agency decided to give all IT staff an opportunity to review and comment on the full specification

2.27 The Agency, from July 1994, kept IT services staff informed about the future of the IT services unit and, in July 1996, established a staff consultative group to advise the procurement team about staff related matters. Senior management did not consider this amount of staff participation enough to relieve perceived concerns staff had about the partnership. Just before the completion of the full specification in January 1997, the Agency's senior management granted all IT services staff within the Agency the opportunity to comment on the document. This additional consultation the Agency considered necessary to provide reassurance to key staff involved.

2.28 This review delayed the procurement process by two months (Appendix 3). As with the outline specification, the Agency had to inform the potential bidders that they were postponing the issue of the full specification. This delay was necessary for staff to review the document and the procurement team to process formally all of the nearly 2,000 raised comments.

Excessive quality assurance was applied to documents produced for internal use

2.29 Delays to the approval of documents were not limited to decisions taken by senior management. The way the Agency applied aspects of the project management methodology known as PRINCE (Projects IN a Controlled Environment) was also a source of delay. The Agency were keen to improve their previous history of project management by adhering to this methodology. PRINCE, which CCTA own, is a structured set of components, techniques and processes designed for managing any type or size of project and is widely used in the public sector. The Agency's application of processes for appraising the quality of documents failed to distinguish between the quality required for documentation that would be issued to potential bidders and the quality of management documents prepared for internal use. **Figure 5** lists some of these latter documents and shows in three extreme cases when the first versions were submitted for review and when the Project Board approved the documents.

2.30 We consider that the application of high quality standards to the documents listed in **Figure 5** was costly and represented an inefficient use of resources. The Agency's requirement that the production of these documents met exacting standards resulted in them being of a sufficient standard that progress with the procurement continued, but with the procurement team, nevertheless, having to deploy resources to address quality related issues. Each time such a document was returned to the procurement team

5 **The elapsed time from the start to the completion of the quality review process as applied to a selection of documents for internal use**

Document	Date when first issued for review	Date of approval
Project Initiation Document	21 September 1995	22 November 1996
Project Security Policy	18 December 1995	1 December 1997
Configuration Management Plan	21 October 1996	July 1998

Source: *The Agency*

6 **The Agency's costs for procuring the partnership**

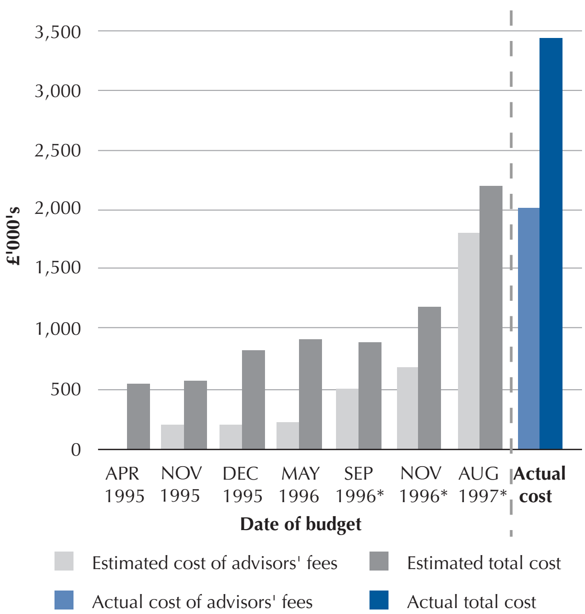
This figure shows that the Agency spent £3,437,000 to secure the partnership

	£000s
Agency's in-house costs	
Staff	501
Accommodation and other overheads	443
Advisors	
ASE	766
Berwin Leighton	483
Capita	651
KPMG	45
CCTA	30
Others	47
Pre-contract transition costs	
CMG	471
Overall total	**3,437**

Note: These figures exclude VAT.

Source: *The Agency*

7 **The Agency's budgets for procuring their partner and the actual out-turn costs**



Note: * excludes £109,000 of sunk costs incurred prior to June 1996.

following a quality review, the quality assurance requirements demanded that the team registered and formally responded to each comment, a process that was labour intensive. The need to apply project management methodologies pragmatically, which includes the application of quality standards, has been mentioned in the report entitled, "Review of Major Government IT Projects, Successful IT: Modernising Government in Action" published by the Cabinet Office in May 2000.

The insistence that exception reports comply with high quality standards obstructed the flow of procurement critical information

2.31 One particularly adverse aspect of the quality review process was its application to reports from the project manager to the Project Board documenting anticipated delays and cost overruns. In October 1996, the new project manager foresaw that the decision to found the partnership on a joint venture company would increase the requirement for expert advice. He raised a report to this effect in November 1996 and submitted it for a quality review. It was returned with a request to address quality related comments. The subsequent exchange between the procurement team and those reviewing the document continued until October 1997. Eventually, the project manager, outside of the agreed process, approached the Agency's chief executive for authorisation to increase the procurement budget.

The Agency continuously underestimated the cost of procuring the partnership

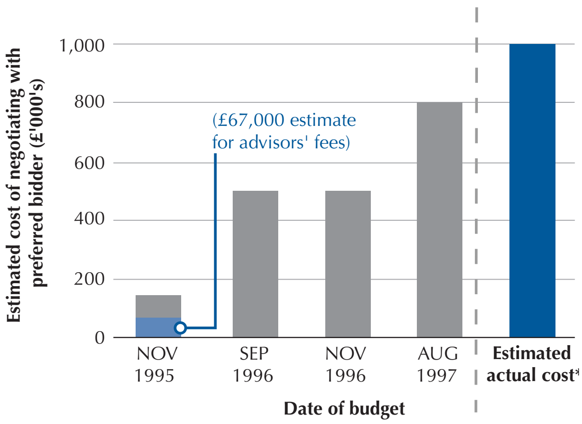
2.32 When the Agency's management board gave the go ahead for the definition study in April 1995 the then project manager estimated that securing a partner would cost the Agency £550,000. When the contract was awarded in June 1998 the Agency had spent approximately £3.4 million net of VAT. Of this sum approximately £2 million was fees paid to the Agency's principal advisors and £0.5 million to CMG for undertaking, in advance of the contract, work that would facilitate the rapid transfer of IT services (**Figure 6**).

2.33 The Agency prepared their original budget by assuming that securing a partner was directly proportional to the cost the Department incurred in outsourcing one element of their IT services. **Figure 7** shows the extent by which the Agency's initial and subsequent estimates were exceeded.

Reasons for the increases are:

- The Agency underestimated the amount of external advice required to prepare the contract documentation for a partnership that met with the management board's satisfaction. The decision in October 1996 to build the partnership around a joint venture company increased the workload of the procurement team.
- The Agency estimated that the cost of employing advisors to process staff comments about the full specification was an additional £120,000. Between late January and mid-April 1997 ASE were actively engaged in dealing with and resolving comments raised by staff. The Agency's records are not sufficiently detailed to verify that processing the results of the reviews required approximately 180 man-days.
- The Agency employed external advisors to stand in for Agency staff while they were on extended sick leave. The procurement team estimated that using advisors to fill these posts cost £125,000. Again the Agency's records are not sufficiently detailed to verify the actual cost.
- The Agency and their advisors underestimated the amount of work necessary to specify the IT services required by the Agency and to resolve all intellectual property issues relating to the Agency's systems.
- The Agency underestimated the amount of time advisors would be engaged in preparing for and being engaged in the negotiations with CMG. We have estimated from the advisors' invoices that the Agency paid fees of nearly £1,000,000 during this stage of the procurement. **Figure 8** shows the increases in the Agency's estimates for this work over the procurement period and the estimated actual expenditure.

8 **The Agency's budgets for negotiating with the preferred bidder and the estimated actual out-turn cost**



Note: *Advisors' fees only

Source: The Agency

- The Agency agreed in February 1998 to pay CMG for undertaking work necessary for the transition of the IT services to Radio Spectrum International in advance of the award of the contract. CMG put together a team to analyse the work needed to set up and establish Radio Spectrum International, to assess the Agency's staff and contractors for roles in Radio Spectrum International and to audit the Agency's existing IT infrastructure and information systems. Anticipating that the contract would be signed on 31 March 1998, the Agency estimated that this work would cost £230,000. The Agency and CMG agreed to continue this work beyond 31 March 1998 when it became apparent that there would be a delay to the signing of the contract. When the contract was signed on 8 June 1998 the cost of the pre-contract transition work had increased to £471,000.

With one exception the appointments of advisors were made following competitive tendering

2.34 All advisors were appointed following a competitive tendering process except CCTA. The Agency engaged CCTA without competition because of their earlier experience of working with CCTA and because the cost was below the threshold to which procurement regulations applied.

2.35 Only in the case of the appointment of ASE did the Agency obtain estimates of the charges for various stages of the procurement. ASE estimated the amount of time their consultants would require to complete each stage and from this calculated that their total charge would be £253,905 net of VAT. This was not a firm offer and their actual charges were based on the time their employees worked on the procurement. The out-turn cost of ASE's contribution was £766,000 net of VAT. The Agency were unable to show us correspondence with ASE either explaining cost overruns for identified parcels of work or containing advance estimates of costs of ordered additional work.

2.36 It would have been in the Agency's interests to obtain estimated prices for specific parcels of work from Berwin Leighton, KPMG and Capita. Such information would have assisted the Agency in their budgeting of the procurement and in ensuring that fees were justified.

Part 3

The foundations have been laid for a successful partnership

3.1 When the Agency decided to base their partnership on a joint venture company, they found that they were breaking new ground in the relationship between the public sector and the private sector. Thus, without a pre-existing model upon which to base the partnership, the Agency built their own. During this process they identified four high level factors that they considered important to the success of the partnership:

- the alignment of strategic business interests;
- each party having a clear understanding of its role in the partnership;
- the establishment of a co-operative and trust based relationship; and
- each party being satisfied with the risks posed by and the share of benefits from the partnership.

3.2 In this part of the report we found that the Agency appear to have achieved a co-operative and collaborative partnership with CMG. The risks and benefits arising from the partnership are considered in part 4.

The Agency sought to align strategic business interests with CMG

3.3 The Agency considered that the success of the partnership hinged upon establishing and sustaining a co-operative relationship with their partner at both operational and managerial levels. To aid the evolution of an environment conducive to partnership, the Agency sought to achieve a genuine alignment of interests between themselves and their partner. Aligning interests means that both partners would have the same business objectives for the joint venture company.

Obtaining an alignment of interests was important to the Agency

3.4 The procurement of the partner was made through an open competition because of the value of the IT services that the partner was to provide. To help them identify parties genuinely interested in partnership, the Agency adopted a prescriptive approach to realising the partnership. This included specifying the means through which the Agency believed they and their partner would achieve an alignment of interests. During the course of the procurement the Agency decided to rely on two principal elements:

- an obligation on the partner to exploit internationally the Agency's systems and expertise; and
- an obligation to create, with the Agency, a joint venture company that would exploit the Agency's expertise and deliver IT services to the Agency.

The Agency judged that they would be better able to assess the commitment of each bidder to partnership from its response to these real issues rather than from the bidder's proposals relating to important, but immeasurable fundamentals of partnership such as trust and good interpersonal relationships.

3.5 The intention of the Agency's prescriptive approach was to secure a partner who was prepared to invest in the creation and expansion of a company specialising in providing spectrum management IT products. If such a company were to succeed, the Agency foresaw that the expertise gained by the company could lead to improvements in the economy, efficiency and effectiveness of their IT services. The Agency reasoned that improving the value for money of the IT services would be in the self interest of the partner for the duration of the partnership as the improvements would increase the marketability of the Agency's intellectual property, which would enhance the value of the joint venture company.

It is too early to ascertain whether the inclusion of the exploitation of the Agency's expertise aligns interests

3.6 The Agency's objective of strengthening the partnership bonds through the creation of a mutually beneficial business was considered by the Agency and their advisors to be a novel development in the relationship between the public and private sectors. The Agency were aware that, because of the untested status of this type of partnership, potential suppliers of IT services would be nervous about the approach.

3.7 The only bidder prepared to enter into partnership on terms approaching those originally proposed by the Agency was CMG. To gauge their commitment to the exploitation of the Agency's expertise we have compared, in **Figure 9**, CMG's contractual obligations to market this business with their actual performance. In the case of every obligation we found that CMG had exceeded their minimum contractual commitments. Moreover, CMG have not just met their obligations passively but have been a very active and willing participant in establishing Radio Spectrum International as a leading company in the field of providing spectrum management solutions.

3.8 CMG's active role in the exploitation of the Agency's expertise is encouraging. The Agency have told us that CMG's secondees to Radio Spectrum International, who deliver IT services to the Agency, have acquired an understanding of the business of spectrum management to a level sufficient for them to communicate with the Agency's users of the IT services. In addition Radio Spectrum International have gained enough understanding of the business to compile bids for international consultancy projects and to provide advice, using Agency expertise as appropriate, to overseas spectrum managers. In the supply of these services the Agency have not yet observed Radio Spectrum International taking the lead in proposing IT solutions to spectrum management problems. Both the Agency and CMG attribute this observation to the small size of the spectrum management market and the fact that the Agency's systems, designed for spectrum management within the UK, have not proved readily exportable.

3.9 The value of Radio Spectrum International depends upon their provision of IT services to the Agency and not with the international business, which is yet to make a profit. Even so, CMG told us that they have been sufficiently encouraged by the enquiries that Radio Spectrum International have received and the four contracts that they have won to want to continue to help exploit the Agency's expertise.

9 A comparison of CMG's contractual obligations regarding marketing the Agency's expertise and their actual performance

Contractual Commitments	Actual Performance
Overcome skills deficit through sub-contracts with the Smith Group and National Economic Research Associates	Sub-contracts signed 8 June 1998, the same day that the partnership was established.
	From 8 June 1998 until 8 November 1999 CMG appointed a Smith Group employee as Radio Spectrum International's director of international marketing. Since the departure of this director the post has remained vacant.
	CMG have encouraged Radio Spectrum International to team up with other firms with expertise in spectrum management.
Spend £100,000 marketing Radio Spectrum International during their first two years of operation	In CMG's contract with the Smith Group, the two parties agreed to divide the obligation 50/50. Expenditure on marketing Radio Spectrum International was reported monthly to the Agency until the end of March 1999 by which time CMG had spent £50,000 and the Smith Group £83,000. CMG told us that they have continued funding Radio Spectrum International's marketing.
Funding bids for international spectrum management work during Radio Spectrum International's first two years	CMG funded £157,000 of sales work.

Source: The Agency and Radio Spectrum International

A joint venture company may not in itself ensure that the interests of the owners are aligned

3.10 As well as seeking an alignment of interests through the exploitation of the Agency's expertise, the Agency also decided to create a visible structure for the partnership through the creation of a joint venture company.

3.11 The Agency's participation in Radio Spectrum International has secured benefits; promoting transparency in pricing and contributing to a co-operative relationship (see 3.21 to 3.35). It is not certain, however, that the creation of Radio Spectrum International has resulted in an alignment of interests. The difference in value of the business of supplying IT services to the Agency compared to the value of the international business (see **Figure 15**) leaves the Agency largely in the role of a purchaser with Radio Spectrum International/CMG in the role of supplier.

Although the Agency wants a trust-based relationship they have ensured that they have contractual protection

3.12 Some of the IT systems transferred to Radio Spectrum International were crucial to the Agency's ability to meet their business objectives, so they sought to reduce the risk of non-performance to a minimum. In the Agency's opinion, this could be achieved, if the partners related well to each other, with the best relationship founded on mutual trust.

3.13 The Agency accepted the principle, expressed by their advisors, that trust requires a mutually supportive environment to thrive, where there is a reciprocal concern about the welfare of the other and encompasses openness and the sharing of risks and benefits. To minimise the potential for disagreement in the contentious area of costs and profits the Agency made it a condition in the contract that Radio Spectrum International retains an open book accounting regime for IT services. This ensures that the Agency have full access to the records of the company. This openness extends to CMG, who have undertaken to provide long-term secondees to the company at cost, and agreed to provide all evidence required by the Agency to verify that charges for such secondees excludes any element of profit. CMG also agreed to grant the Secretary of State for Trade and Industry the right to audit compliance with the relevant terms.

The Agency protected their position in the event that trust was lost

3.14 Despite seeking a relationship with a partner that is dependent on trust, the Agency took the view that trust would take time to develop and might not always be maintained. Entering into a contract for seven years, the Agency were aware that staff and management changes risked eroding established good working relationships. The Agency therefore placed behind the partnership a contractual framework to protect their interests.

3.15 The Agency recognised that the partnership had to operate within a framework of a sound contract. We received advice from Simmons and Simmons, a firm of solicitors, that the rights and obligations described in the nine contracts that comprise the deal are, in general, clear enough to function effectively in the absence of a collaborative relationship with CMG. This approach is now recommended in the PFI Treasury Taskforce's guidance, "Standardisation of PFI Contracts - Information Technology" published in April 2000.

The Agency and Radio Spectrum International have extensively revised the mechanisms for measuring Radio Spectrum International's supply of IT services

3.16 The Agency are in a strong position as the company's only customer of substance. This provides the Agency with powerful bargaining leverage that is supported by specified service levels and credits for non-performance. The initial service levels specified by the Agency in the contract were, however, too abstract for meaningful measurement.

3.17 When the partnership was first proposed, the Agency did not have service levels measuring the performance of the in-house IT services unit. By the time the contract was signed the Agency had been unable to specify the service levels that they wanted Radio Spectrum International to meet. Instead, the contract included high level strategic service levels from which the Agency and Radio Spectrum International were to derive detailed and quantifiable service level agreements during the proposed yearlong transition period. Agreeing measurable service levels took six months longer than envisaged. The Agency were in a stronger position to protect their interests in relation to the performance of the delivered IT services before negotiations with CMG commenced than after the contract was signed. The Committee of Public Accounts drew a similar conclusion in their seventh report of session 1999-2000, "Home Office: The Immigration and Nationality Directorate's Casework Programme" (HC 130).

3.18 The contract requires Radio Spectrum International to submit annually a service improvement plan, but there is no simple contractual remedy against the company relating to its failure to comply. The risk that the provision of services could stagnate is, however, offset by the Agency's right to test annually the value of all services provided by the company and by the Agency's right to tender openly for all other services. The Agency received the draft of Radio Spectrum International's first service improvement plan during Spring 2000 and are discussing it with Radio Spectrum International. These discussions will consider how to achieve measurable improvements.

The Agency have included in the contract provisions that protect their reputation

3.19 The Agency are closely associated with the international consulting business of Radio Spectrum International, having granted the company the right to use the Agency's name and logo in promotional literature. The Agency were aware that a corollary of exploiting their expertise was the risk that their leading role in international spectrum management matters could be undermined by actions of the company. This risk threatened not just the Agency's good reputation with other national spectrum management organisations but, through a loss of reputation, the Agency's ability to secure usage of the radio spectrum in the best interests of the United Kingdom.

3.20 The Agency have taken steps to reduce this risk. They have restricted Radio Spectrum International's use of the Agency's name and logo to promotional literature that the Agency have approved. The risk of the company undertaking work that could potentially embarrass Her Majesty's Government has been tackled through provisions that require the company to obtain the Agency's approval for each and every customer.

The Agency, Radio Spectrum International and CMG are collaborating to make the partnership a success

3.21 While the partnership has existed for just two years, there are indications the Agency have secured a relationship with CMG close to what they wanted, namely a co-operative relationship that is delivering improved IT services without the supply of such services losing its commercial edge. This good working relationship also exists in the exploitation of the Agency's expertise.

The parties are co-operating to make the partnership in the delivery of IT services a success

3.22 Our discussions with senior managers in the Agency and the Agency's partnership monitoring unit suggest that the provision of IT services through the partnership has so far been a success. There is satisfaction that co-operation and collaboration between the Agency and Radio Spectrum International are meeting the Agency's expectations and that users of the IT services are registering greater levels of satisfaction with the services they are receiving.

The Agency attributed improvements to the way changes are made to IT services to the co-operation that partnership has engendered between the parties

3.23 The Agency consider that the success of the partnership is reflected in the implementation of developments or changes to the IT services. These are coming on stream more rapidly and smoothly than the Agency had experienced prior to the partnership. Moreover, the openness promoted by the contract and the Agency's participation at board level in Radio Spectrum International have created an atmosphere where the Agency's senior management have come to treat the CMG senior management secondees as colleagues.

3.24 During the two years that the partnership has been in existence, there have been a number of major IT-related projects that Radio Spectrum International successfully brought on stream. These are documented in **Figure 10**. In the case of the implementation of the Agency's unified licensing system, RULES, the Agency set what all considered to be a very tight deadline. The project met the deadline, something that the Agency attributed to the co-operative working atmosphere of the partnership. The director responsible for the partnership told us that once he overcame his traditional adversarial approach to suppliers he found the collaborative approach very productive.

Satisfaction with the partnership across the Agency is high

3.25 The Agency were impressed with Radio Spectrum International's commitment to consult the Agency's users in overcoming problems associated with their new office automation system. The Agency told us that joint problem solving positively contributed to the implementation of the system. The Agency observed that disruption to their activities was less than they had experienced with the introduction of previous systems. There was also greater user satisfaction with the new system.

3.26 The Agency were sufficiently impressed by the performance of Radio Spectrum International to invite them to assist the Agency in the preparation of their information systems strategy. The Agency are satisfied that the participation of Radio Spectrum International has resulted in a more resilient, business-related strategy when compared to the Agency's earlier strategies. The Agency attribute this success to Radio Spectrum International's ability to access CMG's body of IT professionals. The willingness of Radio Spectrum International to develop the strategy reflecting the Agency's business needs rather than one biased towards technical IT solutions gave the Agency's management the confidence to inform us that they sensed that they are working with a supplier who is interested in the success of the Agency's business.

The Agency negotiated a £1 million per annum reduction in charges

3.27 Co-operation between the parties exists not just at operational level; it can also be seen in the charging for the services. Radio Spectrum International and the Agency realised shortly after the start of the partnership that the charging structure for providing computer services at the desktop was too rigid to accommodate the rapid technological advances to computer hardware and software. The constant stream of technology improvements, while continually re-setting the standard in the market of what constituted a basic service, were, under the contract, classified as enhancements for which Radio Spectrum International have the right to levy a flat-rate charge. This rate was in many cases considerably greater than the cost of supplying and maintaining the enhancement. Where this was the case Radio Spectrum International, with CMG's agreement, waived the flat rate, agreeing instead, a charge for each enhancement that allowed them to recover the cost of providing that enhancement. In cases where the cost was small Radio Spectrum International provided the enhancement free of additional charge.

3.28 The Agency wanted to firm up this arrangement and commenced negotiations with CMG in late 1999. The concluded deal, which was effective from 1 January 2000, should result in savings of approximately £1million a year (in cash terms at 1999 prices), providing there are no volume changes to the services. This agreement was reached without the Agency having to consider invoking their right to test the value of the services.

3.29 Also the Agency demonstrated good will to CMG. The Agency extended, from 12 months to 18 months, the period for reaching agreement on service levels. This extension facilitated more amicable negotiations for introducing workable, measurable and realistic levels. The Agency also delayed the implementation of their right to obtain credits from Radio Spectrum International in circumstances where the supply of IT services was not meeting the requisite levels and clarified their policy relating to the application of service credits, stating that they would only exercise this right in exceptional circumstances. These include performance failures that have either caused the Agency a significant and quantifiable loss or result from Radio Spectrum International not co-operating in efforts to re-establish the service to the specified levels.

10 Major projects successfully completed by Radio Spectrum International

Year 2000 technical compliance

Under the agreement Radio Spectrum International took over responsibility for the ongoing work ensuring that the Agency's systems were able to cope with the year 2000-date change. The Agency reported that they were able to work closely with Radio Spectrum International to develop solutions that suited the relative importance of the systems involved. This was helpful in terms of managing not only the work, but also costs.

Implementing of new systems

The Agency have a major office automation project (EROS) underway. The success achieved to date is, to a significant extent, attributed to Radio Spectrum International's commitment to a harmonious relationship with users and a shared approach to problem solving and management.

The Agency's new unified licensing system (RULES) was implemented on time. The Agency attributed this to the willingness of Radio Spectrum International to be flexible, adjust priorities and take pragmatic decisions regarding application of contractual procedures.

Relocation to new headquarters

The budget for the relocation to the Agency's refurbished headquarters building was placed under considerable strain in 1999-2000. It became apparent in the final quarter that there were incompatibilities between work that Radio Spectrum International wished to take forward and the Agency's financial provisions for IT. Radio Spectrum International were involved in developing pragmatic and mutually acceptable solutions to managing priorities and budgets.

Source: The Agency

The Agency are taking steps to ensure the provision of IT services remains commercially justified

3.30 While the partnership has met the Agency's expectations, it has not lost its commercial edge. This is due to active monitoring of Radio Spectrum International's performance and to tight management of changes and developments to the IT services, including on one occasion securing a more cost effective IT service from another contractor.

3.31 The Agency established a unit to monitor the partnership and to act as the gateway through which all communications relating to operational aspects of the IT services flow between them and Radio Spectrum International. Thirteen employees of the Agency staff this unit, most of whom had been part of the in-house IT services unit. Possessing familiarity with the functionality and performance of the Agency's IT systems, this unit scrutinises Radio Spectrum

11 Estimated savings obtained by the Agency's monitoring of Radio Spectrum International's proposed solutions for nine changes to, or developments of, the IT services made between June 1998 and April 2000

Project	Radio Spectrum International's original estimate	Radio Spectrum International's estimate after negotiations with the Agency	Estimated savings	Estimated savings as a percentage of the original estimate
Unattended Monitoring System	£285,000	£260,000	£25,000	8.8
Changes to FiLSM system	£101,000	£85,000	£16,000	15.8
Post implementation support of the RULES system	£290,000	£247,000	£43,000	14.8
Additional link status of OMNIBUS	£72,000	£60,000	£12,000	16.7
ALPACA stage 9	£953,000	£923,000	£30,000	3.1
RULES Stage 2 - Implementation of the third wave of spectrum pricing	£33,000	£25,000	£8,000	24.2
RAMPS functionality to RULES	£108,000	£104,000	£4,000	3.7
FiLSM	£87,000	£63,000	£24,000	27.6
Memory upgrades to laptops	£22,000	£7,000	£15,000	68.2
Total savings from these nine projects			**£177,000**	

Source: The Agency

International's solutions for meeting the changes and developments to the IT services proposed by the Agency's users. This scrutiny has often resulted in Radio Spectrum International agreeing to reduce their costs for such changes and developments (see **Figure 11**).

3.32 The head of the monitoring unit informed us that, initially, Radio Spectrum International's solutions often exceeded the Agency's business needs and had to be down-graded. More recently, he has observed better correlation between the proposed solutions and the Agency's actual needs.

3.33 In the case of the "Unattended Monitoring System" project (the first of the projects listed in **Figure 11**) the Agency exercised their right to seek other bids for developments to the IT services. Realising that an IT solution was required to meet a business need the Agency approached Radio Spectrum International, but considered the solution they proposed expensive. Making enquiries in the market the Agency found a less expensive solution. With this knowledge the Agency returned to negotiations with Radio Spectrum International and were able to extract a workable deal that was in the interests all parties. Radio Spectrum International agreed to enter into a sub-contract with the third party contractor to undertake the work. While the cost to the Agency for this arrangement is more than they would have paid the third party contractor, the deal struck with Radio Spectrum International not only delivers savings against the original proposal, but also avoids potential conflicts at the interfaces between two IT service suppliers.

3.34 The Agency have also sought to retain commercial pressures on Radio Spectrum International through exercising their right to test the value of the IT services provided by the company. To avoid this threatening the partnership, the Agency have from the outset let it be known that they would make use of this right. The Agency intend to initiate the first value test during the year 2000.

The Agency, Radio Spectrum International and CMG are working to make the international business a success

3.35 There is a good working relationship between the parties in the international consultancy business although initially there were tensions. The Agency attributed these to delays resulting from procedures to protect the Agency's reputation. The Agency's appointment of a manager dedicated to international business, who, with the Agency's encouragement, applies the procedures pragmatically, has resulted in an improved working relationship.

Part 4

The partnership with CMG should deliver significant benefits

4.1 The Agency set out a number of critical success factors for the partnership:

- the achievement of value for money;
- a transfer of business risk to the private sector;
- strategic influence over the venture while having ready and flexible access to a wide range of IT skills and assuring the long-term reliability and stability of the Agency's IT service base; and
- the commercial exploitation of the Agency's radio spectrum expertise while avoiding cross subsidy between the IT services and international business.

4.2 In this part of the report we find that the Agency's partnership with CMG has been successful in meeting many of the key elements of these criteria.

The Agency expect that the partnership will improve the value for money of IT services

4.3 The partnership should deliver improved services at a lower cost. The benefits in cost terms arise mainly from the replacement of contract staff with a more economic and efficient alternative. Improvements in the delivery of services are difficult to measure as there is a lack of information on the levels of service before the partnership came into effect.

4.4 To assess the potential value for money the Agency commissioned their financial adviser, Capita, to compare the cost of a partnership with a private sector IT supplier with two in-house options. Capita produced two main reports, the first in August 1997 before negotiations with CMG commenced and the second in May 1998 on the completion of the negotiations. As the partnership with CMG was not arrived at through a competitive bidding process the comparison of the expected cost of the partnership with in-house options was particularly important in determining whether a good deal was obtained. We examined how the savings were estimated and how the partnership was performing against expectations.

Before commencing negotiations with CMG, Capita produced a financial model against which to assess proposed charges

4.5 In August 1997 Capita, building on work by the Agency's previous financial advisers, CCTA and KPMG, produced a report entitled the "Baseline Business Case" establishing the case for the development of a partnership and the potential savings which would result. This report was subsequently submitted to the Department and the Treasury for approval to proceed.

4.6 The possible cost of the partnership was compared with two Public Sector Comparators. A Public Sector Comparator is intended as a valid benchmark against which private sector bids for work previously undertaken in the public sector can be compared. This enables the cost of different options to be compared, taking account of different risks that may arise.

4.7 Capita compared a partnership with:

- the mix of in-house and contract staff predicted to be necessary, "the existing arrangements"; and
- replacing all contract staff with civil servants.

Capita's estimates of the savings that the partnership offered are summarised in **Figure 12**.

12 **A partnership should generate financial savings**

This figure shows that a partnership was expected to provide more economical IT services than in-house options

	£ million		£ million
Estimated cost of continuing with existing arrangements	**66.3**	Estimated cost of an option in which in-house staff replaced conractors	**56.4**
Less cost of partnership	**54.2-56.0**	Less cost of partnership	**54.2-56.0**
Saving	**10.3-12.1**	Saving	**0.4-2.2**

Note: Figures represent cumulative net present value over 7 years.

Source: The Agency

13 **Projected financial savings after negotiations with CMG were in line with forecasts**

	£ million
Cost of existing arrangements*	62.2
Cost of partnership	51.5
Saving	10.7

* The estimated cost of existing arrangements was revised downwards during the period of negotiations from that shown in Figure 12.

Source: The Agency

4.8 The analysis showed that the partnership was expected to provide more economical IT services than the two in-house options. While the expected savings from the partnership over the option of replacing contractors with in-house staff were marginal, the Agency did not consider the option was feasible. The Agency would encounter the same problems of recruiting and retaining skilled IT staff at civil service pay rates that it had been experiencing. In addition the Agency did not believe that this option would allow them to achieve a sufficient skills base to meet all their needs, especially in the development of new services. This option would, therefore, mean an important benefit of a partnership would not be achieved, notably access to a pool of IT staff with varied skills which could be applied to the diverse projects which were planned. The Agency therefore rejected the option of replacing contractors with in-house staff as a benchmark.

On completion of negotiations with CMG, the Agency expected that the partnership would improve the value for money of their IT services

4.9 On completion of the negotiations with CMG, Capita prepared a "Final Business Case" in which the present value costs of CMG's charges for the IT services were compared with the remaining public sector comparator. The results are summarised in **Figure 13**. The Agency estimated that the net present value of the deal was £10.7m, which was within the range of savings that Capita, in the "Baseline Business Case", considered feasible (**Figure 12**).

4.10 CMG included in their bid an assessment of the impact that improved standardisation of desktop services would have on the charges the Agency would pay for partnership supplied IT services. From these figures Capita estimated that the present value cost of IT services would reduce to £50.8m. CMG also priced two further scenarios of partnership supplied IT services: one, in which there was an annual eight per cent increase in demand; and the other, an annual four per cent fall in demand. The present value costs were estimated to be £55.4m and £49.5m respectively. In their assessment of value for money, the Agency compared these three figures against their Public Sector Comparator without adjusting it to suit the changes incorporated in each of the scenarios.

The Public Sector Comparator had some deficiencies

4.11 In preparing the Public Sector Comparator the Agency assumed that:

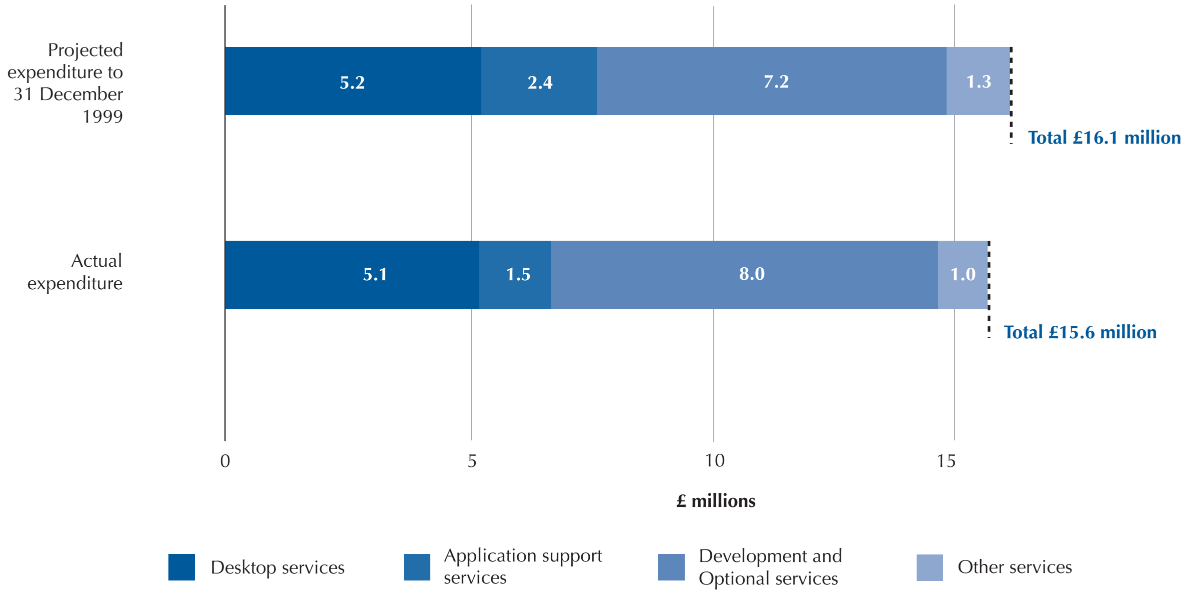
- annual expenditure on in-house IT services could reasonably be represented by the actual cost of IT services for 1996-97; and
- the number of in-house staff and contractors would remain constant over the seven years of the proposed partnership, a "steady-state scenario".

4.12 The Agency extracted the costs for 1996-97 from a new general ledger system, introduced at the beginning of that year. They told us that the previous system was not sophisticated enough to allow information to be extracted for earlier years. The costs for 1996-97 may, however, have been higher than average because of payments made in that year for establishing computer facilities at the Agency's temporary headquarters following damage to their offices in the Docklands bombing in February 1996.

4.13 The assumption that the same mix of in-house staff and contractors would be needed over the full period of the proposed partnership may also not have been valid. In 1996-97 the Agency were introducing a unified licensing system, an IT development larger than IT projects normally undertaken by the Agency. Significantly, the model of the cost of IT services supplied by CMG, against which the public sector comparator was compared, assumed a decrease in development work from the year 2000 onwards. Comparing the steady state scenario in the public sector comparator with CMG's costs which assumed reduction in demand was not comparing like with like and may

14 **The Agency's expenditure on IT services has been less than expected**

This figure shows that to 31 December 1999 the Agency's expenditure on IT services was £0.5 million less than expected



Source: The Agency

have overstated the potential savings. To redress this discrepancy we sought information that would have allowed us to calculate how much CMG, under the partnership, would have charged the Agency for development work in 1996-97. Information about the development work, however, did not exist in sufficient detail to quantify the work for pricing purposes. As an alternative approach we accepted the Agency's view that the amount of development work in 1996-97 was within the range of annual amounts of development work included for the first two-and-a-half years of the partnership. CMG's estimated charges for this development work are between £2.5 million and £3.2 million per annum. On the basis of these figures the potential level of savings reduce from £10.7 million to between £4.9 million and £8.0 million.

Expenditure on IT services is in line with expectations

4.14 Forecasts of expenditure were prepared by the Agency's financial advisers, Capita, and included in the business case to demonstrate how value for money would be achieved. **Figure 14** shows the expected expenditure on the key IT services up to 31 December 1999 and the actual expenditure that has been incurred.

4.15 The savings on the cost of desktop services were achieved despite the Agency having 2,200 non-standard items instead of the 380 they had included in the projections in the business case. Charges levied by Radio Spectrum International are based on the numbers of such items in use. Radio Spectrum International and CMG agreed, in the spirit of partnership, to waive charges for most of these non-standard items. We estimate that this saved the Agency up to £500,000 in the year ended 31 December 1999. This waiver is now recognised contractually in a new agreement that came into effect on 1 January 2000 (paragraphs 3.27 and 3.28).

4.16 The overspend of £800,000 on development and optional services was due to expenditure on items and projects that had not been foreseen when the partnership agreement was signed. Unforeseen items of expenditure included a computer system necessary to support the auction of licences to operate parts of the radio spectrum, enhancing the system supporting the new general ledger, various studies into new requirements and the Agency's move into a refurbished headquarters building.

The Agency have a contract with mechanisms that preserve the payment of a fair price for the IT services

4.17 An important element of the partnership is "open-book" accounting. This permits both the Agency and CMG full access to the financial records of the joint venture company. This supplements the knowledge the Agency gain from their representation at Board level and permits a full review of financial transactions. The contract also provides for access to the books of the joint venture company and CMG by the Comptroller and Auditor General as is relevant for the purposes of examining and certifying the Agency's accounts and determining the economy, efficiency and effectiveness with which the Agency have used their resources.

4.18 The contract with the joint venture company for the supply of IT services permits the Agency to benchmark costs by going out to tender for certain IT services, including modifications to existing services and the development of new systems. It is a requirement of the contract that the Agency give Radio Spectrum International the opportunity to participate in such a competition. These provisions permit the Agency to compare what they are paying under the contract with market prices and provide the Agency with flexibility in securing specific skills not available from Radio Spectrum International. In paragraph 3.33 we have given an example of the Agency exercising this option to good effect.

The cost of IT services cannot readily be compared with other public sector outsourcing arrangements

4.19 We set out to compare the cost of the Agency's new arrangements for procuring IT services with the cost of other public sector outsourcing deals. CCTA told us that there is a dearth of readily available, reliable data on which an IT services benchmarking exercise can be founded. Outsourcing agreements are not standard in terms of the services provided and the pricing structures that exist. The terms of contracts are also subject to frequent amendment. CCTA were unable to provide us with data to make any cost comparisons.

4.20 CCTA told us that they would like to carry out research into the costs of IT services that Government departments have purchased from the private sector to get consistent data but that they had been unable to obtain funding for this research.

Efficiency improvements are difficult to determine

4.21 The Agency had little data on the levels of services provided before the partnership was established. The lack of a benchmark means that we cannot be certain that improvements have been achieved. The Agency told us that they were very pleased with the quality of service being provided and that they were carrying out a review to try and quantify the benefits of the joint venture. Agreed service levels have been introduced for the main services and these are monitored closely by the intelligent customer function in the Agency. For the future, changes in the quality of service being provided by Radio Spectrum International will be measurable. CCTA, the public sector body with the principal overview of public sector deals, told us that it is usually the case in the public sector that outsourcing deals are entered into without a benchmark of pre-outsourcing service levels.

The partnership exposes the Agency to a low level of risk

The partnership does not expose the Agency to significant operational risks

4.22 CMG plc, the parent company of CMG (UK) Ltd, is a leading European IT services group listed on the United Kingdom and Amsterdam Stock Exchanges. For many years CMG (UK) Ltd have been a major supplier of IT services to the Agency, including systems and software development. The Agency were therefore in a position to judge that they had the capacity to provide the range of IT skills and IT services required.

The Agency have a minimal financial investment at risk

4.23 By establishing the partnership through a limited company, the Agency have nominally limited their financial liability to the value of their shareholding - £300. We consider, however, that where the public sector is involved in providing services to other countries, as is the case with the International Business Division of Radio Spectrum International, it would be difficult for the Agency to avoid continuing financial commitments in the event of the failure of the company. The Agency, in setting up the joint venture, took steps to minimise the risk of additional liabilities arising from the failure of Radio Spectrum International. These are discussed in the following paragraphs.

Radio Spectrum International was financially viable from the start of the contract

4.24 The Agency's contract with Radio Spectrum International for IT services provided the company with a revenue stream from the outset that was expected to yield a pre-tax profit equivalent to six per cent of turnover during the company's first two years. In subsequent years the business plan anticipates the level of profit gradually reducing to 1.5 per cent of turnover by the seventh year. The performance of Radio Spectrum International in the first 18 months of trading is summarised in **Figure 15.**

4.25 In the first 18 months of operation Radio Spectrum International have made pre-tax profits equivalent to about seven per cent of turnover. The increased profit level could be an indication that the Agency are paying too high a price for their IT services or that Radio Spectrum International have improved efficiency above that expected in CMG's bid, or a mixture of both. With regard to the price the Agency are paying, the transparency of the profit being made and the Agency's access to the records of Radio Spectrum International and CMG permit the Agency to review charges and discuss revisions where desirable. The fact that the Agency have already concluded a deal to reduce the charges for non-standard desktop items demonstrates the positive nature of this partnership arrangement.

4.26 While the level of profit is greater than expected, some of it is returned to the Agency, through their 30 per cent share of the dividend - £241,000 in 1999.

The Agency have retained control over intellectual property rights

4.27 Under the contractual agreements with CMG and Radio Spectrum International, all intellectual property rights arising from the development and delivery of IT services are vested in the Agency. The partnership has in practice increased the Agency's control over intellectual property rights. During the procurement the Agency discovered that CMG, under a pre-existing contract for the development of the Agency's unified licensing system, RULES, owned the intellectual property rights to this system. Under a deed of assignment CMG agreed to transfer their rights in the system to the Agency.

4.28 Radio Spectrum International have been granted an exclusive licence to use the Agency's name and logo and intellectual property for the purposes of marketing and providing consultancy services. Radio Spectrum International can also sub-license intellectual property to customers. However, the Agency have ensured through the International Business Agreement that their position is protected. Radio Spectrum International have to submit details of prospective customers to the Agency and obtain their approval before any agreements are entered into with customers. All intellectual property rights revert to the Agency on termination of the contract.

15 **Radio Spectrum International have made a profit in their first 18 months of trading**

	6 months to 31 December 1998 £'000's	Year ending 31 December 1999 £'000's	18 months to 31 December 1999 £'000's
Turnover	3,918	13,122	17,040
Operating profit	101	1,146	1,247
Profit after tax	62	740	802
Dividend payable	-	(802)	(802)
Operating profit attributable to IT services	114	1,274	1,388
Operating (loss) attributable to international consultancy	(13)	(128)	(141)

Source: Radio Spectrum International accounts

CMG have assumed a number of risks

4.29 CMG receive from Radio Spectrum International the cost of employees they second to the company, a management fee equal to 11 per cent of the charges for the IT services and 70 per cent of the distributable profits. CMG have accepted a number of risks:

- They have undertaken to lend Radio Spectrum International any working capital that is required. In addition they undertook to provide a minimum of £100,000 of resources and other inputs to the International Business Division in the first year of operation.
- In any year that the IT Services Division of Radio Spectrum International makes a loss, CMG's management fee will be reduced to make it nominally profitable, and if this is not sufficient CMG is under the obligation to reduce charges for the staff they second to the company.
- The parent company of CMG (UK) Ltd have provided an indemnity against all liability, loss, damage, cost and expenses in connection with any acts or omissions by Radio Spectrum International in the provision of IT services.

There is a market for the international consultancy services offered by Radio Spectrum International

4.30 We reviewed the progress achieved by the joint venture in commercially exploiting the Agency's expertise, although the short period of time the international division has been operating is too short to make firm judgements about its success.

4.31 Expressions of interest in the services offered by the joint venture company have been greater than the Agency expected and Radio Spectrum International have tendered for over 40 projects. Many of these come from developing countries and the provision of funding is often difficult, delaying the securing of contracts. The demand for services offered has been helped by the growth in mobile telephone usage world-wide and the need for more effective management of the radio spectrum to ensure that network providers can deliver a proper service.

4.32 By March 2000 Radio Spectrum International had won four consultancy contracts with overseas organisations. Two projects, in Russia and Greece, have been completed and work is in progress on projects in Egypt and India. Three detailed proposals have been submitted for work in the Gulf States. The marketing and sales efforts mean that losses are still being made (see **Figure 15**). The business case assumed that six contracts would be obtained for the supply of consultancy services by March 2000 but also that a contract would be won for the supply of IT systems, the most likely element to generate significant profits.

The Agency may profit from the international business in the longer term

4.33 If the international business becomes profitable the Agency will share profits arising from the international work in accordance with their 30 per cent shareholding in the company. The Agency and CMG reviewed the performance of the international business division during June 2000. Under the contract with Radio Spectrum International, the Agency and CMG could terminate Radio Spectrum International's role in commercial exploitation of the Agency's expertise after two years. As a result of the review both parties have agreed to continue to develop the international business. An International Business Plan is being produced to reflect the strategy agreed. This will now be reviewed annually.

Radio Spectrum International have not yet won any contracts for the provision of spectrum management systems but systems under development might be more marketable

4.34 The Agency expected the International Business Division would be able to market RULES and other systems and that the first successful bid for a system project would arise by March 2000. In practice it has not been possible to sell any of the Agency's systems. The Agency told us that potential users find them expensive and they are not readily adaptable to meet local circumstances.

4.35 If the Agency and CMG decide to continue with the international venture the intention is that Radio Spectrum International will develop the next generation of IT systems on a modular basis. This will permit systems to be more readily sold overseas and, where necessary, to be tailored to suit local circumstances.

4.36 This aspect of the project highlights one area where improvements might have been possible. The Agency did not carry out an in-depth assessment of the market for their expertise; this might have identified that their systems were not readily saleable and affected the emphasis placed in the procurement on linking the provision of IT services and commercial exploitation as one project. The Agency were also unable to prepare a detailed business proposal for the sale of their systems and expertise that might have encouraged more interest in the project. The implications might not be significant to the Agency as CMG have provided the working capital for the venture and the Agency is therefore exposed to minimal financial risk.

The Agency may gain financially from international consultancy work

4.37 The Agency and The Smith Group, a company contracted with CMG to provide support to the International Business Division, have supplied most of the consultants employed on international work to date to Radio Spectrum International. The Agency is allowed under the contract to charge Radio Spectrum International at commercial rates for the staff they supply, thereby ensuring that a return is made to the Agency irrespective of the profitability of international work.

There is complete separation of the profits and losses of the IT Services Division and the International Business Division

4.39 When approving the joint venture with CMG, the Secretary of State for Trade and Industry instructed that the partnership must stand alone without the direct support of Government. The IT Services Division of the joint venture should be viable because of the assured income stream from the Agency. To ensure that this part of the business does not subsidise any losses from the new business of selling the Agency's expertise, the IT Services Division and the International Business Division are accounted for separately.

4.40 The separate accounting for these two activities also ensures that there can be no claims that a public body is being subsidised to compete in the commercial market.

The Agency's participation in international business increases the profile of the Agency overseas

4.41 The Agency promote the interests of United Kingdom radio users through key roles in the Conference of European Postal and Telecommunications Administrations (CEPT) and on a wider level in the International Telecommunication Union (the United Nations Agency that co-ordinates and manages radio use world-wide through the International Radio Regulations that it promulgates). It is important for the Agency to promote themselves Internationally and to ensure that they do not undertake work that may detract from their reputation. The Agency believe they have developed very good policies and systems for radio spectrum management and that this deserves to be recognised more widely as an example of best practice.

The contract with Radio Spectrum International allows the Agency to veto Radio Spectrum International's participation in work that might compromise the Agency's integrity

4.42 Initially the Agency referred all enquiries from overseas administrations to the Foreign Office for their agreement to proceed. In the light of experience the Agency are taking a more pragmatic view by allowing Radio Spectrum International to proceed with overseas business opportunities while necessary assurances are sought. This will speed up the process of responding to queries from potential customers.

Marketing of Radio Spectrum International should increase the profile of the Agency

4.43 The Agency granted Radio Spectrum International a licence to use the Agency's name and logo when marketing the Agency's systems. If Radio Spectrum International perform poorly this will detract from the Agency's reputation. If they continue to perform well this will reflect positively on the Agency and enhance their reputation by being seen to be at the leading edge of spectrum management.

Appendix 1

Scope and methodology of the National Audit Office's examination

Scope of this study

1 We examined why the Agency chose to set up a joint venture company, in partnership with a private sector supplier, as the means to provide their IT services and exploit their expertise in radio spectrum management. The arrangement has been operating for 18 months and we were therefore able to examine performance in the early stages of the partnership. In particular we examined:

- why the Agency needed to improve the efficiency and effectiveness of their IT services and why they chose a partnership with a private sector supplier as the best way of achieving this;
- whether the partnership with CMG is likely to provide the sustained provision, to specified quality standards, of the Agency's IT services;
- the extent to which the partnership with CMG is likely to be a more economical, efficient or effective solution than the Agency continuing to provide IT services in house, taking account of the transfer of risk to the private sector; and
- if the partnership with CMG is likely to exploit successfully the skills of the Agency in overseas markets.

Main aspects of the National Audit Office's methodology

2 The examination covered:

- **The conduct of the procurement**: how the Agency went about the task.

The purpose of this part of the examination was to assess whether the Agency's approach was well planned and implemented and likely to produce an outcome in line with their objectives. In particular we focused on the reasons for significant time delays and cost increases in arriving at the partnership.

- **The establishment of a partnership**: the steps by the Agency to ensure that the arrangement with CMG addresses the key requirements likely to lead to a successful partnership.

This part of the examination identified the key elements of a partnership that need to be addressed in the deal with CMG and how the Agency took these into account in their procurement.

- **Outcome**: how far the partnership should deliver value for money to the Agency.

This part of the examination focused on the extent to which the partnership with CMG is likely to deliver the hoped-for benefits to the Agency. It also encompassed the early performance of the partnership.

3 In undertaking this examination we:

- designed the examination using experience acquired on our earlier studies of Private Finance Initiative deals and IT outsourcing studies;
- collected information about the procurement process and the deal;
- used an external consultancy firm for advice on procurement matters relating to IT services and obtained independent legal advice on contractual matters; and
- evaluated the information and advice received.

Collection of information

4 We collected information from the following sources:

- a review of the Agency's papers, bidders' submissions and of the legal agreements underpinning the deal;
- interviews with Agency senior management, officials and advisers, on how they handled the negotiation of the deal;
- interviews with companies that had initially shown interest in the project but subsequently withdrew from the process; and
- interviews with the two companies that submitted bids.

Use of external expertise

5 We engaged Lorien, a firm with extensive experience in carrying out Public Private Partnership studies, to examine the procurement process and advise on project management. We also engaged Simmons and Simmons, a legal firm with experience of Private Finance Initiative deals, to review all the contracts entered into by the Agency with CMG and Radio Spectrum International and to consider whether these were appropriate and properly protected the Agency's position.

Appendix 2 Key events during the procurement of the partnership

1993

The Agency undertook to consider market testing their in-house IT services.

1995

April CCTA commenced a definition study of the project.

September The Agency's management board accepted, with some reservations, CCTA's report defining the partnership.

1996

February The Agency's advert appeared in the Official Journal of the European Communities. The Agency received 56 expressions of interest. To each interested party the Agency sent a questionnaire. 22 parties responded. From these the Agency prepared a long list of 12 potential bidders.

May The Agency postponed the issue of the Outline Specification.

June/July The Agency reorganised their procurement team.

August The Agency appointed ASE to provide advice on IT matters. The Agency issued their Outline Specification to the long list of potential bidders and hosted an open suppliers meeting.

October The Agency appointed Berwin Leighton as legal advisors. The Agency decided to structure the partnership through a joint venture company.

December The Agency appointed KPMG as temporary financial advisors.

1997

January The Agency postponed the issue of the Full Specification while their IT staff were given an opportunity to review the document.

April The Agency appointed Capita as financial advisers. The Agency issued their Full Specification to the six remaining potential bidders.

June The Agency received two responses to their Full Specification.

July The Agency completed their review of the two responses and rejected one of these.

July/August The Agency decided not to hold effective control over the joint venture company, a material change to the procurement.

September The Agency re-invited the six potential bidders to respond to the Agency's decision to pass control of the joint venture company to their partner. This did not engender further interest in the project.

October The Agency commenced their negotiations with CMG.

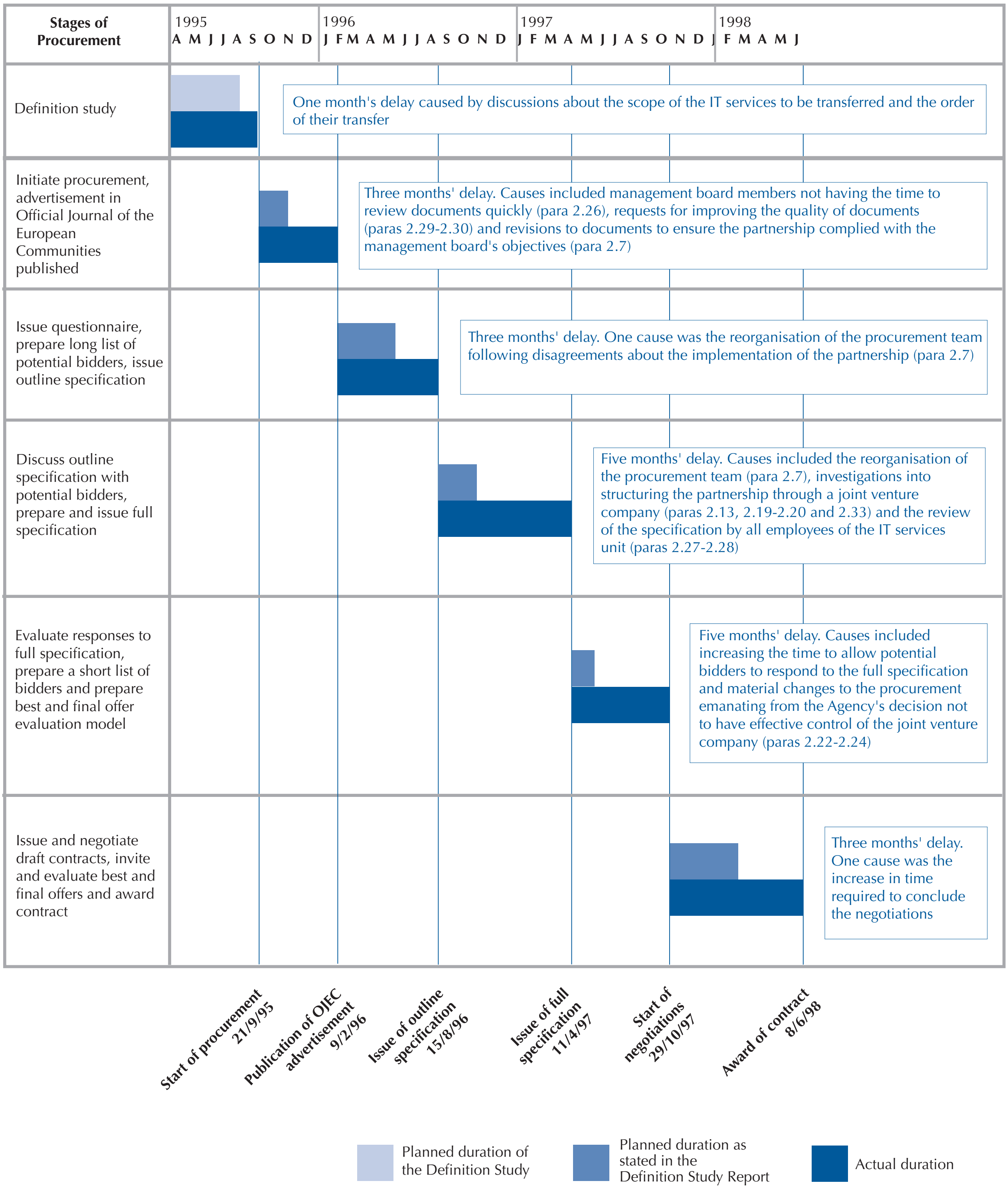
1998

8 June The Contract was signed.

Appendix 3

Comparisons between the planned procurement programme and the actual outcome

Comparison of project programme with outturn



Source: The Agency